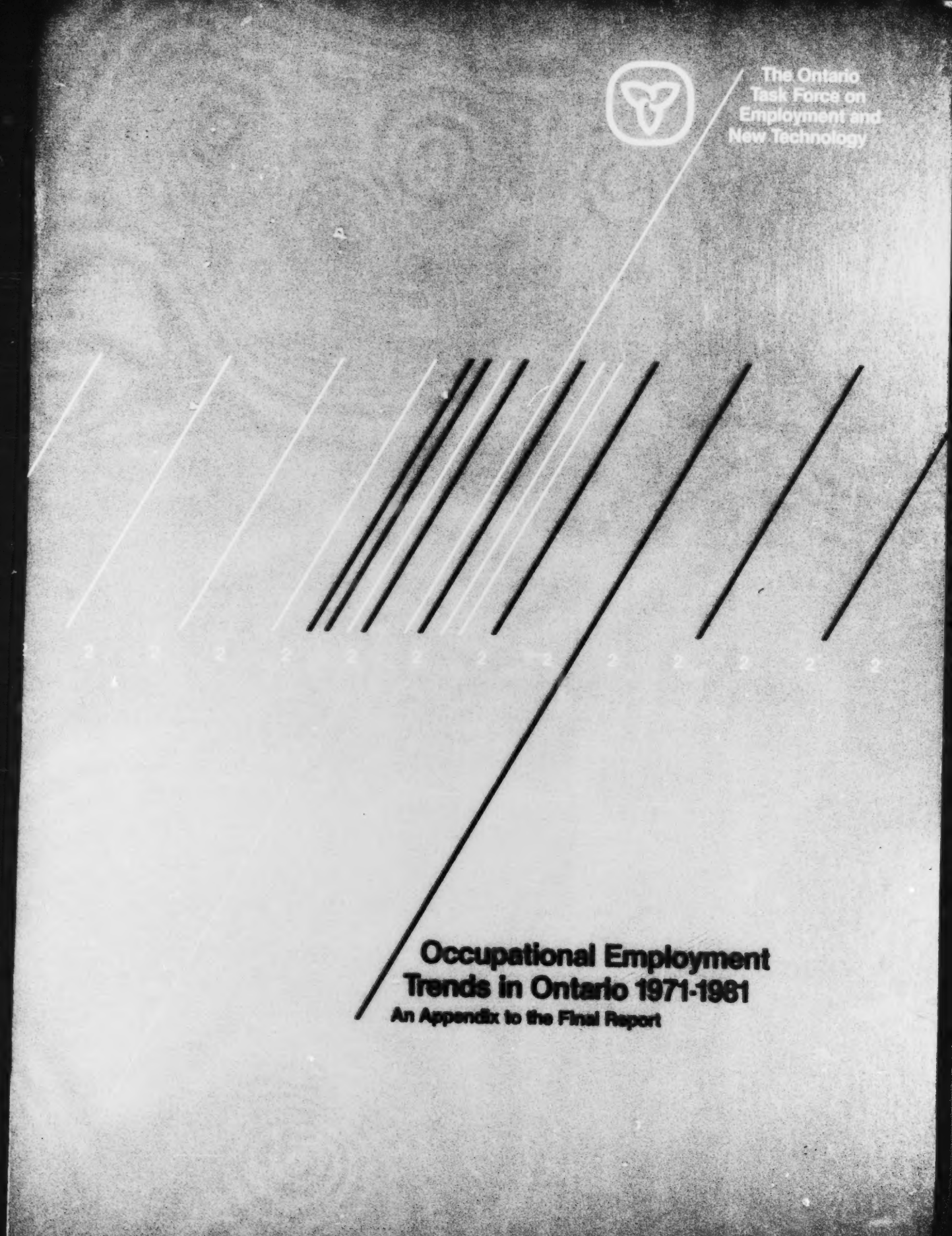


The Ontario Task Force on Employment and New Technology

Occupational Employment Trends in Ontario 1971-1981

An Appendix to the Final Report

86-03649/

ONTARIO TASK FORCE ON EMPLOYMENT AND NEW TECHNOLOGY

Co-Chairmen of the Task Force

WILLIAM B. BOGGS
Chairman and President, The de Havilland Aircraft of Canada Ltd.

ROBERT WHITE
Director for Canada, United Auto Workers Union

Members of the Task Force

RALPH BARFORD
Chairman, Valleydene Corporation Ltd.

JALYNN BENNETT
Investment Vice-President, The Manufacturers Life Insurance Co.

LUCIE NICHOLSON
President, Ontario Division, Canadian Union of Public Employees

FRED POMEROY
President, Communications Workers of Canada

THOMAS ARMSTRONG
Deputy Minister, Ontario Ministry of Labour

BENSON WILSON
Chairman, Ontario Manpower Commission

Staff

Richard Brown, Research Director

Stanley But

Hildegard Martens

OCCUPATIONAL EMPLOYMENT TRENDS IN ONTARIO
1971-1981

This Appendix contains a report prepared for the Ontario Task Force on Employment and New Technology. The topic was approved in advance by the Task Force. At the conclusion of the study, the Task Force had the opportunity to review the report but its release does not necessarily imply endorsement of the results by the Task Force or its individual members.

© Her Majesty the Queen in right of Ontario, 1985
ISBN: 0-7729-0441-3

Additional copies of this and other Ontario Government publications are available from:

The Ontario Government Bookstore, 880 Bay Street, Toronto, Ontario for personal shopping. Out-of-town customers write to Publications Services Section, 5th Floor, 880 Bay Street, Toronto M7A 1N8. Telephone (416) 965-6015. Toll free long distance 1-800-268-7540, in area code 807 dial 0-Zenith 67200. Mastercard and Visa accepted. Cheques and money orders payable to the Treasurer of Ontario. Prepayment required.

FOREWORD

The Ontario Task Force on Employment and New Technology, a joint labour-management group, was established in May 1984 "to consider and report on the manpower and employment implications of new technologies as the same may be introduced and applied in Ontario during the next decade and the extent and nature thereof."

To inform its discussions, the Task Force established a research agenda designed to gather information on employment and technological change from a wide variety of sources. The research agenda contained projects which gathered information of a historical nature, and projects with a future orientation which were designed to gather information describing likely occupational and employment implications associated with technological change in the 1985-1995 period.

The Appendices to the Final Report of the Ontario Task Force on Employment and New Technology contain reports of these research projects. A complete list of these Appendices may be found at the rear of this document. This particular Appendix examines recent occupational employment trends in Ontario over the 1971-1981 period. The study traces employment levels, growth, and growth rates for all occupational groups in all industry sectors.

Over the long term, the changing nature of work tasks in our society will result in measurable occupational trends. Since these are closely associated with technological change, the study of occupational trends is an important activity in any examination of the employment-related effects of technological change.

This Appendix, together with the labour market trends over the 1950-1980 period presented in Appendix 1, provides an historical perspective from which to examine future employment changes.

Dr. Richard L.E. Brown, P. Eng.
Research Director

ACKNOWLEDGEMENTS

The Ontario Task Force on Employment and New Technology has been generously supported by financial contributions from:

The Board of Industrial Leadership and Development (BILD)
of the Government of Ontario;
The Ontario Manpower Commission; and
The Ontario Ministry of Labour.

The Task Force would like to thank the Ontario Manpower Commission, whose technical support and assistance is most warmly acknowledged.

The valuable contribution made by Stanley But and Mehboob Janmohamed, the authors of this report, and Dr. Hildegard Martens, Michael Doucette, and Daniel Thompson in the preparation of the report, are particularly acknowledged.

HIGHLIGHTS

The main objective of this report is to analyse occupational employment trends in Ontario over the 1971-1981 period.

Technological change, along with other forces, affects the number, type and mix of tasks to be done in the workplaces of Ontario. Over the long term, changes in tasks are reflected in the occupational trends apparent within and across industries. This study identifies employment growth and growth rates in the occupations and industries of Ontario. Data are presented for all industry sectors, and for occupational groups at the 2-digit and 4-digit Canadian Classification and Dictionary of Occupations (CCDO) levels. The report identifies different industries and occupational groups in Ontario which have gained and lost in their share of total employment over the last decade. Employment growth and growth rates are also identified for 4-digit occupations including those which have varied greatly and sometimes in opposite directions to the larger 2-digit occupational group in which they are contained.

Overall, employment in Ontario grew by 1,008,600 between 1971 and 1981, or at approximately 100,000 new jobs per year. Communities, Business and Personal Services was the leading industry sector contributing to employment growth, followed by Trade; Finance, Insurance and Real Estate; Public Administration; and Transportation and Storage. These 5 sectors together account for about 82 percent of total job gains over this period.

All CCDO two-digit occupational groups, with the exception of Mining occupations, grew over the 1971-1981 period. Six occupational groups together account for 811,570 new jobs (81 percent). They are: Clerical occupations; Managerial and Administrative occupations; Service occupations; Product Fabricating, Assembling and Repairing occupations; Sales occupations; and Natural Sciences, Engineering and Mathematics occupations.

TABLE OF CONTENTS

PAGE

Foreword i

Acknowledgement ii

Highlights iii

Table of Contents v

List of Figures vii

List of Tables ix

List of Appendices xi

1.0 Introduction 1

2.0 A Summary Of Industry Employment Trends, 1971-1981 3

2.1 Distribution of Employment by Industry, 1981 5
2.2 Employment Growth by Industry 7
2.3 Employment Growth Rates by Industry 9
2.4 Employment Growth Due to Change in Industry Employment and Change in Occupational Distribution 11

3.0 A Summary Of Occupational Employment Trends, 1971-1981 13

3.1 Occupational Distribution 15
3.2 Occupational Employment Growth 17
3.3 Occupational Employment Growth Rates 19
3.4 Major Four-Digit Occupations 21

4.0 Occupational Employment Trends By Industry Sector 23

4.1 Agriculture, Fishing and Trapping 24
4.2 Forestry 28
4.3 Mineral Fuel Mines and Wells 32
4.4 Other Mines and Quarries 36
4.5 Food, Feed, Beverage and Tobacco 40
4.6 Textiles and Clothing 44
4.7 Wood and Furniture 48
4.8 Paper, Printing and Allied Industries 52
4.9 Primary Metal and Metal Fabricating 56
4.10 Motor Vehicles and Parts 60
4.11 Machinery and Other Transportation Equipment 64
4.12 Electrical Products 68
4.13 Chemicals, Rubber and Petroleum 72
4.14 Non-Metallic Mineral Products 76
4.15 Other Manufacturing Industries 80
4.16 Construction 84

Table of Contents (Cont'd)

PAGE

4.17 Electric Power and Gas Utilities 88
4.18 Transportation and Storage 92
4.19 Communication 96
4.20 Trade 100
4.21 Finance, Insurance and Real Estate 104
4.22 Communities, Business and Personal Services 108
4.23 Public Administration 112

Appendices 117

LIST OF FIGURES

PAGE

FIGURES1,2,3,4: Employment Level, Distribution, Growth, Growth Rates: By Industry and Sex 3

FIGURES5,6,7,8: Employment Level, Distribution, Growth, Growth Rates: By Occupation and Sex 13

FIGURES9,10,11: Employment Distribution, Growth, Growth Rates: Agriculture, Fishing and Trapping 24

FIGURES 12,13,14: Employment Distribution, Growth, Growth Rates: Forestry 28

FIGURES 15,16,17: Employment Distribution, Growth, Growth Rates: Mineral Fuel Mines and Wells 32

FIGURES 18,19,20: Employment Distribution, Growth, Growth Rates: Other Mines and Quarries 36

FIGURES 21,22,23: Employment Distribution, Growth, Growth Rates: Food, Feed, Beverage and Tobacco 40

FIGURES 24,25,26: Employment Distribution, Growth, Growth Rates: Textiles and Clothing 44

FIGURES 27,28,29: Employment Distribution, Growth, Growth Rates: Wood and Furniture 48

FIGURES 30,31,32: Employment Distribution, Growth, Growth Rates: Paper, Printing and Allied Industries 52

FIGURES 33,34,35: Employment Distribution, Growth, Growth Rates: Primary Metal and Metal Fabricating 56

FIGURES 36,37,38: Employment Distribution, Growth, Growth Rates: Motor Vehicles and Parts 60

FIGURES 39,40,41: Employment Distribution, Growth, Growth Rates: Machinery and Other Transportation Equipment 64

FIGURES 42,43,44: Employment Distribution, Growth, Growth Rates: Electrical Products 68

FIGURES 45,46,47: Employment Distribution, Growth, Growth Rates: Chemicals, Rubber and Petroleum 72

FIGURES 48,49,50: Employment Distribution, Growth, Growth Rates: Non-Metallic Mineral Products 76

FIGURES 51,52,53: Employment Distribution, Growth, Growth Rates: Other Manufacturing Industries 80

PAGE

FIGURES 54,55,56: Employment Distribution, Growth, Growth Rates: Construction 84

FIGURES 57,58,59: Employment Distribution, Growth, Growth Rates: Electric Power and Gas Utilities 88

FIGURES 60,61,62: Employment Distribution, Growth, Growth Rates: Transportation and Storage 92

FIGURES 63,64,65: Employment Distribution, Growth, Growth Rates: Communication 96

FIGURES 66,67,68: Employment Distribution, Growth, Growth Rates: Trade 100

FIGURES 69,70,71: Employment Distribution, Growth, Growth Rates: Finance, Insurance and Real Estate 104

FIGURES 72,73,74: Employment Distribution, Growth, Growth Rates: Communities, Business and Personal Services 108

FIGURES 75,76,77: Employment Distribution, Growth, Growth Rates: Public Administration 112

LIST OF TABLES

PAGE

TABLE 1: Employment by 23 Industry sectors for All Occupations, Ontario, 1971 - 1981 4

TABLE 2: Summary of Analysis of Employment by 23 Industry Sectors for all Occupations, Ontario, 1971 - 1981 6

TABLE 3: Analysis of Employment Share by 23 Industry Sectors 8

TABLE 4: Summary of Employment Growth, Ontario, 1971-1981 Due to Industry Growth and Occupational Change 10

TABLE 5: Employment by 2-Digit Occupational Groups for all Industries, Ontario, 1971 - 1981 14

TABLE 6: Summary of Analysis of Employment by 2-Digit Occupational Groups for all Industries, Ontario, 1971 - 1981 16

TABLE 7: Analysis of Employment Share by 2-Digit Occupational Groups 18

TABLE 8: 4-Digit Occupations with a Total Employment (1981) of at Least 20,000 in all Industries 20

TABLE 9: Selected 4-Digit Occupations in the Agriculture, Fishing and Trapping Industry 27

TABLE 10: Selected 4-Digit Occupations in the Forestry Industry 31

TABLE 11: Selected 4-Digit Occupations in the Mineral Fuel Mines and Wells Industry 35

TABLE 12: Selected 4-Digit Occupations in the Other Mines and Quarries Industry 39

TABLE 13: Selected 4-Digit Occupations in the Food, Feed, Beverage and Tobacco Industry 43

TABLE 14: Selected 4-Digit Occupations in the Textiles and Clothing Industry 47

TABLE 15: Selected 4-Digit Occupations in the Wood and Furniture Industry 51

TABLE 16: Selected 4-Digit Occupations in the Paper, Printing and Allied Industries Industry 55

TABLE 17: Selected 4-Digit Occupations in the Primary Metal and Metal Fabricating Industry 59

PAGE

TABLE 18: Selected 4-Digit Occupations in the Motor Vehicles and Parts Industry 63

TABLE 19: Selected 4-Digit Occupations in the Machinery and Other Transportation Equipment Industry 67

TABLE 20: Selected 4-Digit Occupations in the Electrical Products Industry 71

TABLE 21: Selected 4-Digit Occupations in the Chemicals, Rubber and Petroleum Industry 75

TABLE 22: Selected 4-Digit Occupations in the Non-Metallic Mineral Products Industry 77

TABLE 23: Selected 4-Digit Occupations in the Other Manufacturing Industries Industry 83

TABLE 24: Selected 4-Digit Occupations in the Construction Industry 87

TABLE 25: Selected 4-Digit Occupations in the Electric Power and Gas Utilities Industry 91

TABLE 26: Selected 4-Digit Occupations in the Transportation and Storage Industry 95

TABLE 27: Selected 4-Digit Occupations in the Communication Industry 99

TABLE 28: Selected 4-Digit Occupations in the Trade Industry 103

TABLE 29: Selected 4-Digit Occupations in the Finance, Insurance and Real Estate Industry 107

TABLE 30: Selected 4-Digit Occupations in the Communities, Business and Personal Services Industry 111

TABLE 31: Selected 4-Digit Occupations in the Public Administration Industry 115

LIST OF APPENDICES

PAGE

APPENDIX A: Employment Growth due to Change in Industry Employment and Change in Occupational Distribution, Ontario, 1971-1981 117

APPENDIX B: Analysis of Change in Occupational Distribution for 2-Digit Occupational Groups in 23 Industry Sectors, Ontario, 1971-1981 121

APPENDIX C1: Employment by 2-Digit Occupational Groups in the Agricultural, Fishing & Trapping Industry, Ontario, 1971 - 1981 125

APPENDIX C2: Employment by 2-Digit Occupational Groups in the Forestry Industry 126

APPENDIX C3: Employment by 2-Digit Occupational Groups in the Mineral Fuel Mines and Wells Industry 127

APPENDIX C4: Employment by 2-Digit Occupational Groups in the Other Mines and Quarries Industry 128

APPENDIX C5: Employment by 2-Digit Occupational Groups in the Food, Feed, Beverage and Tobacco Industry 129

APPENDIX C6: Employment by 2-Digit Occupational Groups in the Textiles and Clothing Industry 130

APPENDIX C7: Employment by 2-Digit Occupational Groups in the Wood and Furniture Industry 131

APPENDIX C8: Employment by 2-Digit Occupational Groups in the Paper, Printing and Allied Industries Industry 132

APPENDIX C9: Employment by 2-Digit Occupational Groups in the Primary Metal and Metal Fabricating Industry 133

APPENDIX C10: Employment by 2-Digit Occupational Groups in the Motor Vehicles and Parts Industry 134

APPENDIX C11: Employment by 2-Digit Occupational Groups in the Machinery and Other Transportation Equipment Industry 135

APPENDIX C12: Employment by 2-Digit Occupational Groups in the Electrical Products Industry 136

APPENDIX C13: Employment by 2-Digit Occupational Groups in the Chemicals, Rubber and Petroleum Industry 137

PAGE

APPENDIX C14: Employment by 2-Digit Occupational Groups in the Non-Metallic Mineral Products Industry....138

APPENDIX C15: Employment by 2-Digit Occupational Groups in the Other Manufacturing Industries Industry....139

APPENDIX C16: Employment by 2-Digit Occupational Groups in the Construction Industry....140

APPENDIX C17: Employment by 2-Digit Occupational Groups in the Electric Power and Gas Utilities Industry....141

APPENDIX C18: Employment by 2-Digit Occupational Groups in the Transportation and Storage Industry....142

APPENDIX C19: Employment by 2-Digit Occupational Groups in the Communication Industry....143

APPENDIX C20: Employment by 2-Digit Occupational Groups in the Trade Industry....144

APPENDIX C21: Employment by 2-Digit Occupational Groups in the Finance, Insurance and Real Estate Industry....145

APPENDIX C22: Employment by 2-Digit Occupational Groups in the Communities, Business and Personal Services Industry....146

APPENDIX C23: Employment by 2-Digit Occupational Groups in the Public Administration Industry....147

APPENDIX D1: Summary of 4-Digit Occupations that Gained in Employment Share....149

APPENDIX D2: Summary of 4-Digit Occupations that Lost in Employment Share....153

APPENDIX D3: Summary of 4-Digit Occupations that Gained and Lost in Employment Share....156

APPENDIX E: Part-time and Full-time Employment in Ontario, 1981....159

APPENDIX F: Employment by Age and Sex in Ontario, 1981....161

APPENDIX G: Industry Sector Definitions by 3-Digit Standard Industrial Classifications (SIC)....163

APPENDIX H: 2-digit Occupational Groups (CCDO)....165

1.0 INTRODUCTION

The main objective of this report is to analyse the historical occupational employment trends in Ontario over the 1971-1981 period.

Technological change affects the number, type and mix of tasks to be done in the workplaces of Ontario. Over the long term, changes in tasks are reflected in the occupational trends apparent within and across industries. This study seeks to identify the fastest and slowest growing industries and occupations, the changes in employment shares resulted from different rates of employment growth, and the changes in occupational employment within each industry sector.

In addition to this report, a number of other studies have also been prepared for the consideration of the Ontario Task Force on Employment and New Technology. The purpose of these studies is to provide background information regarding recent historical labour market developments, and to assist an examination of the extent and nature of the manpower and employment implications in Ontario over the next 10 years.

The Census data presented in this report were obtained from Statistics Canada. A detailed breakdown of employment information for 1971 and 1981 (1971 definitions) by industry and occupation is provided. In this study, the Ontario data are grouped into 23 major industry sectors and each sector contains occupational information on CCDO 2-digit as well as 4-digit levels (see Appendices G and H for definitions of occupational groups and industry sectors).

The report is structured in the following way:

- Section 2 summarizes the industry employment trends, including industry employment levels, employment growth, and employment growth rates;
- Section 3 summarizes the occupational employment trends, including occupational employment levels, employment growth, and employment growth rates;
- Section 4 analyses detailed occupational employment trends for each of 23 industry sectors;
- Employment data by part-time and full-time, and by age and sex are presented in Appendices E and F, respectively.

2.0 A SUMMARY OF INDUSTRY EMPLOYMENT TRENDS, 1971-1981

- Total employment in Ontario grew from 3,165,000 in 1971 to 4,174,000 in 1981. Of the 23 industry sectors, the 5 largest employment sectors together account for almost 63 percent of total employment. These sectors are: Communities, Business and Personal Services; Trade; Public Administration; Finance, Insurance and Real Estate; and Construction.

- In 1981, females accounted for about 41.5 percent of the total employment, an increase of almost 6 percent over the 1971-1981 period. Females have the highest employment concentration in the Textiles and Clothing sector (62.7 percent), followed by Finance, Insurance and Real Estate (60.9 percent), and Communities, Business and Personal Services (60.2 percent).

- Males have very high employment concentrations in 9 industry sectors. These are: Other Mines and Quarries (90.1 percent); Construction (90 percent); Primary Metal and Metal Fabricating (85.9 percent); Forestry (84.9 percent); Machinery and Other Tranportation Equipment (83.7 percent); Motor Vehicles and Parts (83.6 percent); Electric Power and Gas Utilities (83.3 percent); Non-Metallic Mineral Products; and Transportation and Storage (80.7 percent).

FIGURE 1
EMPLOYMENT BY INDUSTRY AND SEX, ONTARIO, 1971 AND 1981

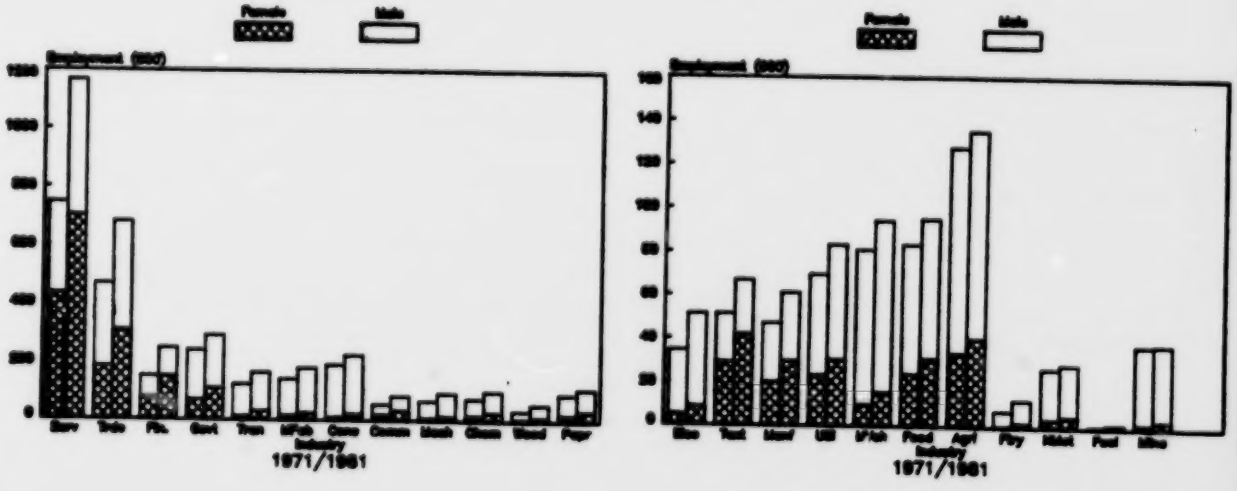
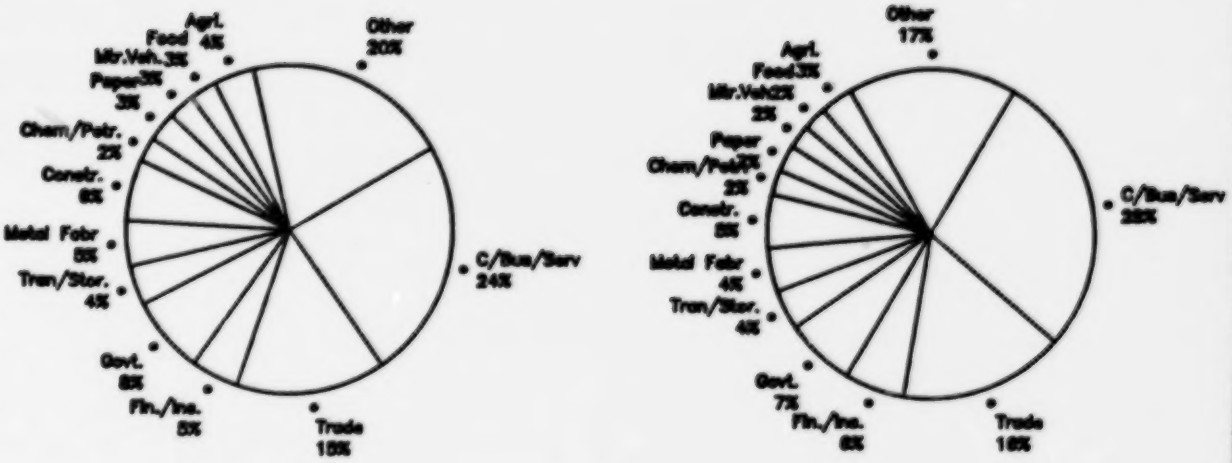


TABLE 1
EMPLOYMENT BY 23 INDUSTRY SECTORS FOR ALL OCCUPATIONS, ONTARIO, 1971 - 1981

IND CODE	INDUSTRY	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
1	AGRI./FISHING	127.9	73.7	26.3	4.0	135.5	70.2	29.8	3.2	0.9	6.7	7.65	0.8	0.6
2	FORESTRY	7.3	92.3	7.7	0.2	12.2	84.9	15.1	0.3	3.6	1.3	4.91	0.5	5.3
3	MIN. FUEL/MINES	0.9	75.1	24.9	0.0	1.7	64.0	36.0	0.0	0.4	0.4	0.83	0.1	6.7
4	OTHER MINES	37.5	95.1	4.9	1.2	37.9	91.1	8.9	0.9	-1.1	1.5	0.41	0.0	0.1
5	FOOD/TOBACCO	83.4	71.3	28.7	2.6	95.1	67.3	32.7	2.3	4.5	7.2	11.73	1.2	1.3
6	TEXT./CLOTHING	51.3	43.4	56.6	1.6	66.8	37.3	62.7	1.6	2.7	12.9	15.58	1.5	2.7
7	WOOD/FURNITURE	34.5	81.7	18.3	1.1	56.1	77.1	22.9	1.3	15.0	6.6	21.58	2.1	5.0
8	PAPER & ALLIED	91.2	75.4	24.6	2.9	110.0	68.5	31.5	2.6	6.6	12.2	18.81	1.9	1.9
9	PR. METAL/FABR.	141.1	88.7	11.3	4.5	178.4	85.9	14.1	4.3	28.0	9.3	37.23	3.7	2.4
10	MTR. VEH./PARTS	80.9	87.6	12.4	2.6	94.3	83.6	16.4	2.3	8.0	5.4	13.39	1.3	1.5
11	MACH./TRANS.EQ.	67.0	86.5	13.5	2.1	93.0	83.7	16.3	2.2	19.8	6.1	25.95	2.6	3.3
12	ELECTRICAL PROD	69.5	66.6	33.4	2.2	83.2	63.5	36.5	2.0	6.5	7.2	13.69	1.4	1.8
13	CHEM./PETROLEUM	74.5	75.3	24.7	2.4	100.4	70.8	29.2	2.4	14.9	11.0	25.84	2.6	3.0
14	NON-METAL. MIN.	26.7	86.3	13.7	0.8	28.6	82.8	17.2	0.7	0.7	1.3	1.98	0.2	0.7
15	OTHER MANUFACT.	47.1	57.5	42.5	1.5	61.1	51.4	48.6	1.5	4.3	9.7	14.02	1.4	2.6
16	CONSTRUCTION	189.7	94.2	5.8	6.0	222.1	90.0	10.0	5.3	21.3	11.1	32.38	3.2	1.6
17	ELEC./GAS UTIL.	34.5	85.4	14.6	1.1	51.4	83.3	16.7	1.2	13.4	3.6	16.93	1.7	4.1
18	TRANSP.&STORAGE	122.8	89.2	10.8	3.9	162.9	80.7	19.3	3.9	21.9	18.2	40.09	4.0	2.9
19	COMMUNICATIONS	54.5	62.4	37.6	1.7	83.1	58.1	41.9	2.0	14.3	14.3	28.53	2.8	4.3
20	TRADE	467.6	61.2	38.8	14.8	682.1	55.1	44.9	16.3	89.4	125.1	214.47	21.3	3.8
21	FINANCE/INSUR.	149.1	47.8	52.2	4.7	245.8	39.1	60.9	5.9	24.9	71.8	96.67	9.6	5.1
22	COM./BUS. SERV.	747.2	42.2	57.8	23.6	1165.6	39.8	60.2	27.9	149.4	269.0	418.35	41.5	4.5
23	GOVT. SECTOR	239.1	71.0	29.0	7.6	289.5	62.3	37.7	6.9	10.5	39.9	50.37	5.0	1.9
99	OTHER IND.	219.6	54.9	45.1	6.9	116.8	55.5	44.5	2.8	-55.7	-47.1	-102.79	-10.2	-6.1
	TOTAL	3164.9	64.4	35.6	100.0	4173.5	58.5	41.5	100.0	404.2	604.4	1008.60	100.0	2.8

FIGURE 2
DISTRIBUTION OF EMPLOYMENT
BY INDUSTRY, ONTARIO, 1971 AND 1981



1971 1981

2.1 Distribution of Employment By Industry, 1981

- Of the 23 industry sectors in 1981, Communities, Business and Personal Services was the largest employer in Ontario (27.9 percent), followed by Trade (16.3 percent), Public Administration (6.9 percent), and Finance, Insurance and Real Estate (5.9 percent).

- Industry sectors which have experienced large gains in their share of total employment over this period include: Communities, Business and Personal Services; Trade; Finance, Insurance and Real Estate.

- Industry sectors which have significant losses in their share of total employment include: Agriculture, Fishing and Trapping; Construction; Public Administration (see Table 1).

TABLE 2
SUMMARY OF ANALYSIS OF EMPLOYMENT BY 23 INDUSTRY SECTORS FOR ALL OCCUPATIONS, ONTARIO, 1971 - 1981

Ind. Code	Industry	Employment Growth (000)	1981 Rank (Employment Share)	MAJOR CONTRIBUTORS TO[1] EMPLOYMENT GROWTH			HIGH GROWTH RATES (%)[2]		EMPLOYMENT SHARE[3]	
				Total	Female	Male	Female	Male	Gained	Lost
22	Comm., Bus. Ser.	418.35	1	x	x	x		x	x	
20	Trade	214.47	2	x	x	x	x		x	
21	Finance/Ins.	96.67	4	x	x	x	x	x	x	
23	Public Admin.	50.37	3	x	x					x
18	Trans. & Storage	40.09	7	x	x	x	x		x	
9	Prim. Metal/Fab.	37.23	6			x				x
16	Construction	32.38	5			x				x
19	Communications	28.53	15				x	x	x	
11	Machinery/Trans.	25.95	13					x	x	
13	Chemical/Petrl'm	25.84	10					x	x	
7	Wood/Furniture	21.58	18							x
8	Paper & Allied	18.81	9				x	x	x	
17	Utilities	16.93	19							x
6	Text/Clothing	15.58	16				x	x	x	
15	Oth. Manufacturing	14.02	17							x
12	Electrical Prod.	13.69	14							x
10	Motor Veh. & Parts	13.39	12							x
5	Food, Feed, Tob.	11.73	11							x
1	Agri/Fishing	7.65	8							x
2	Forestry	4.91	22							x
14	Non Metal Mineral	1.98	21						x	
3	Min. Fuel/Mine	0.83	23							x
4	Other Mines	0.41	20						x	
										x
99	Other Industries	(102.79)								
	All Industries	1008.60								

1 Together accounted for 80 percent of total employment growth for that column.
2 Growth rates significantly higher than the average for that column.
3 Gain or loss in share as a result of higher and lower than average employment growth rate.

2.2 Employment Growth By Industry

- Employment in Ontario rose by 1,008,600 between 1971 and 1981, or approximately 100,000 new jobs per year.

- Communities, Business and Personal Services was the leading contributor in employment growth (418,350), followed by Trade (214,470), Finance, Insurance and Real Estate (96,670), Public Administration (50,370), and Transportation and Storage (40,090).

- While females occupy only 41.5 percent of total employment, they account for almost 60 percent of the employment growth. The growth in female employment is particularly pronounced in the following sectors: Communities, Business and Personal Services; Trade; Finance, Insurance and Real Estate; and Public Administration.

FIGURE 3
EMPLOYMENT GROWTH BY INDUSTRY AND SEX, ONTARIO, 1971 - 1981

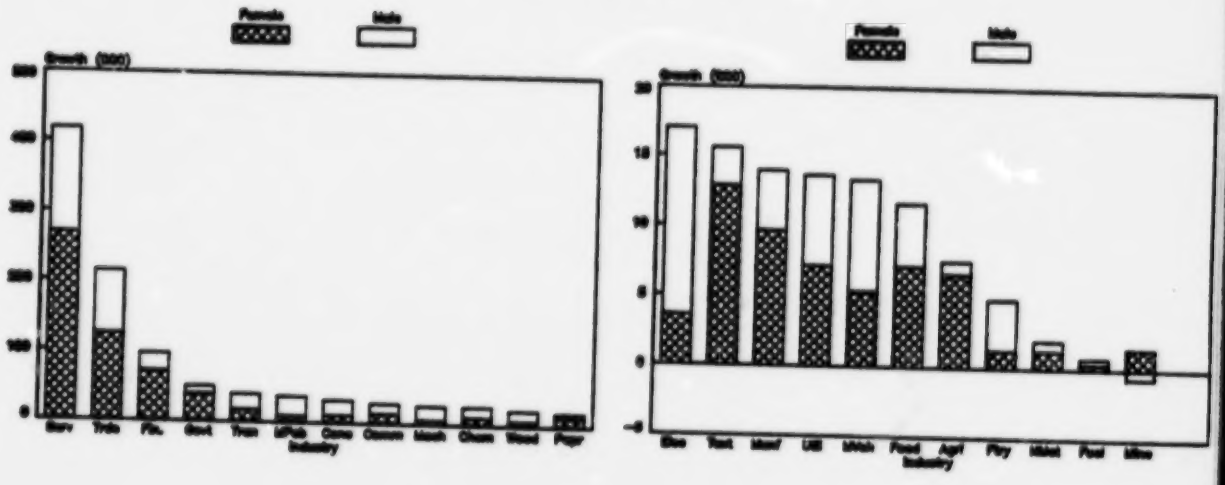


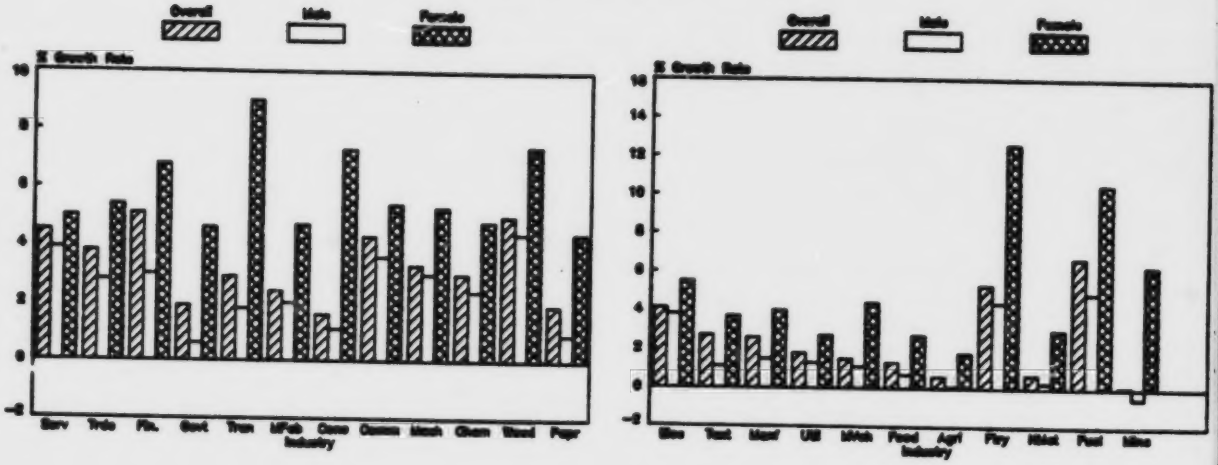
TABLE 3

ANALYSIS OF EMPLOYMENT SHARE BY 23 INDUSTRY SECTORS, 1971-1981

(Ranked by Employment Growth)

Ind. Code	Industry	Employment Growth(000) 1971-1981	PERCENTAGE GROWTH RATES		
			Gain in Share	No Change In Share	Loss in Share
22	Com/Bus. Services	418.4	4.5		
20	Trade	214.5	3.8		
21	Finance/Ins.	96.7	5.1		
23	Govt. Sector	50.4			1.9
18	Trans. & Storage	40.1	2.9		
9	Prim. Metal/Fab.	37.2			2.4
16	Construction	32.9			1.6
19	Communications	28.5	4.3		
11	Machinery/Trans.	26.0	3.3		
13	Chemical/Petrl'm	25.8	3.0		
7	Wood/Furniture	21.6	3.0		
8	Paper & Allied	18.8			1.9
17	Utilities	16.9	4.1		
6	Text/Clothing	15.6			2.7
15	Oth. Manufacturing	14.0			2.6
12	Electrical Prod.	13.7			1.8
10	Motor Veh. & Parts	13.4			1.5
5	Food, Feed, Tobacco	11.7			1.3
1	Agri/Fishing	7.7			0.6
2	Forestry	4.9	5.3		
14	Non Metal Mineral	2.0			0.7
3	Mineral Fuel/Mine	0.8	6.7		
4	Other Mines	0.4			0.1
99	Other Industries	(102.8)			(6.1)
-	All Industries	1008.6		2.8	

FIGURE 4
EMPLOYMENT GROWTH RATES (%) BY INDUSTRY AND SEX, ONTARIO, 1971 - 1981



2.3 Employment Growth Rates By Industry

- Employment for all industries in Ontario grew by 31.9 percent between 1971 and 1981, or approximately 2.8 percent per year.
- Among the 5 major employers, Finance, Insurance and Real Estate has the highest annual employment growth rate (5.1 percent), followed by Communities, Business and Personal Services (4.5 percent), and Trade (3.8 percent).
- Construction and Public Administration both have below average annual employment growth rates.
- The employment growth rates for females are much higher than for males in all 23 industry sectors.
- As a result of varying employment growth rates among the 23 industry sectors, 11 sectors have gained in their share of total employment, while 12 have lost in employment share (see Table 3).

TABLE 4
SUMMARY OF EMPLOYMENT GROWTH, DUE TO CHANGE IN INDUSTRY EMPLOYMENT AND CHANGE IN OCCUPATIONAL DISTRIBUTION, ONTARIO, 1971-1981

IND CODE	OCCUPATION	TOTAL GROWTH (000)	MGM/ ADMIN	NAT SCI	SOC SCI	RELI -GION	TEACH -ING	MED/ HLTH	ART/ REC	SPORTS	CLERIC -AL	SALES	SERVICE	FARM -ING	FISH -ING	FORESTRY	MINE/ QUARY	PROC -ESS	MACHNG	FAB/ ASSY	CONST -RUCTN	TRANSPT	MATRL HANDL	OTHER CRAFTS
ALL	INDUSTRIES(000)	1009	168	68	38	2	41	54	25	5	256	98	134	7	0	0	-1	37	19	104	29	28	16	12
	DUE TO IND GROWTH		73	38	18	4	64	62	13	3	234	138	152	13	0	4	1	38	31	85	43	35	22	13
	DUE TO OCC CHANGE		87	22	20	-2	-23	-8	12	2	22	-31	-18	-6	0	-4	-2	7	-13	18	-14	-7	-6	-1
ALL	INDUSTRIES	1009	0	I	0	I	I	I	I	I	I	I	I	I	S	I	-0	I	I	I	I	I	I	I
1	AGRI. FISH. TRAP	8	0	0				0			0	0	0	I	0	0		-0	S	0	0	0		
2	FORESTRY	5	0	0							I		I	I		I		I	S	I	I	I	S	
3	MINERAL FUEL MINE	1	I	I							I						I	S				S		
4	OTHER MINES	0	0	0	0		0				0		0				-0	0	S	0	0	-0	-0	-0
5	FOOD FEED TOBACCO	12	0	0	0				S		I	-0	I	-0				I	-0	0	-0	I	I	-0
6	TEXTILES	16	0	I			0	S	I		I	I	-0					I	I	I	S	I	I	S
7	WOOD & FURNITURE	22	I	I					I		I	I	I			I		I	I	I	I	I	I	S
8	PAPER & ALLIED	19	0	S	0				I		I	-0	I			-0		I	-0	I	S	I	I	I
9	PR METAL/FABRICAT	37	0	I	S		S	S	S		I	-0	I				-0	I	I	I	-0	I	I	S
10	MOTOR VEH/PARTS	13	0	0	-0			0			I	-0	-0					-0	I	I	-0	-0	I	I	S
11	MACH & OTH TRANSP	26	0	I			S		I		I	-0	I				S	0	I	I	I	-0	I	I	S
12	ELECTRICAL PRODUC	14	0	I	S			S	S		I	-0	-0					0	-0	I	-0	S	I	S
13	CHEM RUBBER/PETRL	26	0	I	0		0	S	S		I	-0	-0	S				I	I	I	I	I	I	I
14	NON-MET MINERAL	2	0	0	S		0		0		I	S	-0					I	0	I	-0	I	I	
15	OTH MANUF IND	14	0	I	S			0	I		I	-0	S					I	S	I	I	I	I	I
16	CONSTRUCTION	32	0	I							0	I	I	0			-0	I	-0	0	I	-0	-0	S
17	UTILITIES	17	0	I			S				I	-0	I	S	I			S	I	I	I	I	I	I
18	TRANSPORTATION	40	0	I	S		0	0			I	I	I	S		S		S	S	I	I	I	I	-0
19	COMMUNICATION	29	0	I	0		I	S	I		I	I	I							I	I	S	S	I
20	TRADE	215	0	0	0		0	I	I	S	I	I	I	-0				I	I	I	I	I	I	I
21	FINANCE/INSURANCE	97	I	I	I		0	S	I		I	I	I	I				-0	-0	I	I	I	-0	I
22	COM/BUS SERVICES	418	I	I	I	I	I	I	I	I	I	I	I	I				I	I	I	I	I	I	I
23	PUBLIC ADMIN	58	0	I	0		I	-0	0	0	I	-0	I	I	S	-0		S	-0	I	-0	S	-0	-0

NOTES: I = CHANGE DUE TO INDUSTRY GROWTH IS GREATER THAN CHANGE DUE TO OCCUPATIONAL SHIFT
0 = CHANGE DUE TO OCCUPATIONAL SHIFT IS GREATER THAN CHANGE DUE TO INDUSTRY GROWTH
S = EQUAL CHANGE DUE TO INDUSTRY GROWTH AND OCCUPATIONAL SHIFT

2.4 Employment Growth Due To Change in Industry Employment And Change In Occupational Distribution

- The change due to industry employment had a positive contribution to growth in all occupational groups.

- Employment growth due to changes in industry growth were greater than that due to changes in occupational distribution in all except three occupational groups.

- In Managerial, Administrative and Related occupations the growth due to changes in occupational distribution was larger than that due to industry growth.

- Similarly, in the Social Sciences and Related occupations, the growth due to occupational change was larger than that contributed due to changes in industry.

- The Mining and Quarrying occupations were the only group that had a net decline in employment level from 1971 to 1981. This decline was due to a negative change in occupational distribution that resulted in a larger loss than the gain contributed by change in industry growth.

- Thirteen occupational groups had negative changes in occupational distribution resulting in job losses in those occupations. Therefore, positive overall growth in these occupational groups was solely due to growth in industry employment.

- The remaining eight occupational groups had employment growth contributions both due to growth in industry, as well as, change in occupational distribution (see Appendix A for details).

3.0 A SUMMARY OF OCCUPATIONAL EMPLOYMENT TRENDS, 1971-1981

- All of the 23 two-digit occupational groups, with the exception of Mining occupations, gained in employment over the 1971-1981 period.

- The six largest occupational groups together account for almost 62 percent of the total employment in 1981. These groups are: Clerical occupations; Service occupations; Sales occupations; Fabricating, Assembling and Repairing occupations; Managerial and Administrative occupations; and Construction Trades occupations.

- Female employment is concentrated in Medical and Health occupations (78.5 percent), followed by Clerical occupations (77.3 percent), Teaching occupations (58.4 percent), Social Science occupations (52.3 percent), and Service occupations (51.2 percent).

- Male employment is concentrated in Construction Trades occupations and Mining occupations (both 98.1 percent), followed by Transportation Equipment Operating occupations (91.7 percent), and Machining occupations (90.6 percent).

FIGURE 5
EMPLOYMENT BY OCCUPATION AND SEX, ONTARIO, 1971 AND 1981

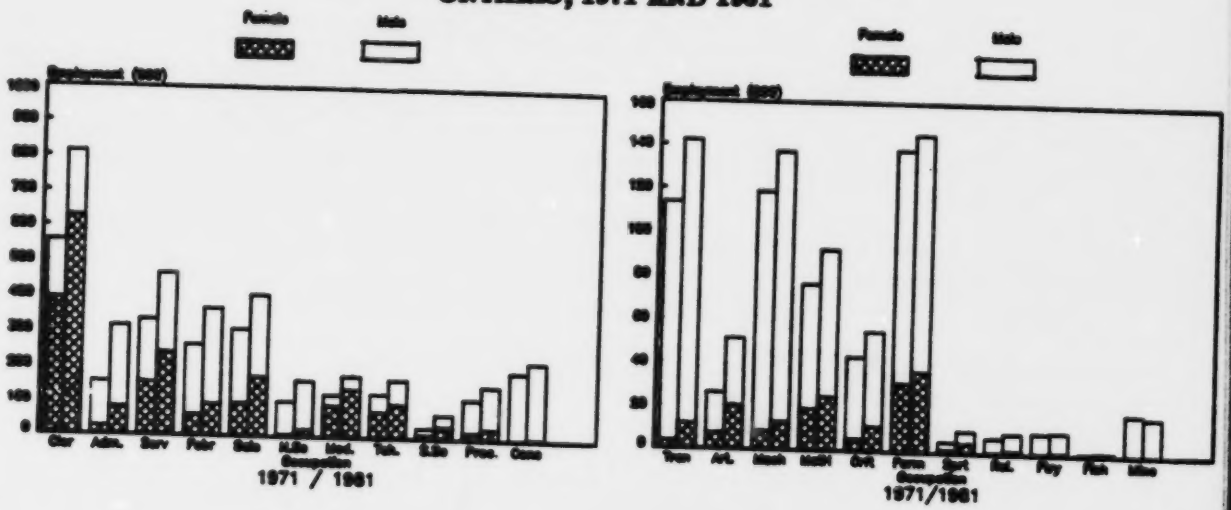
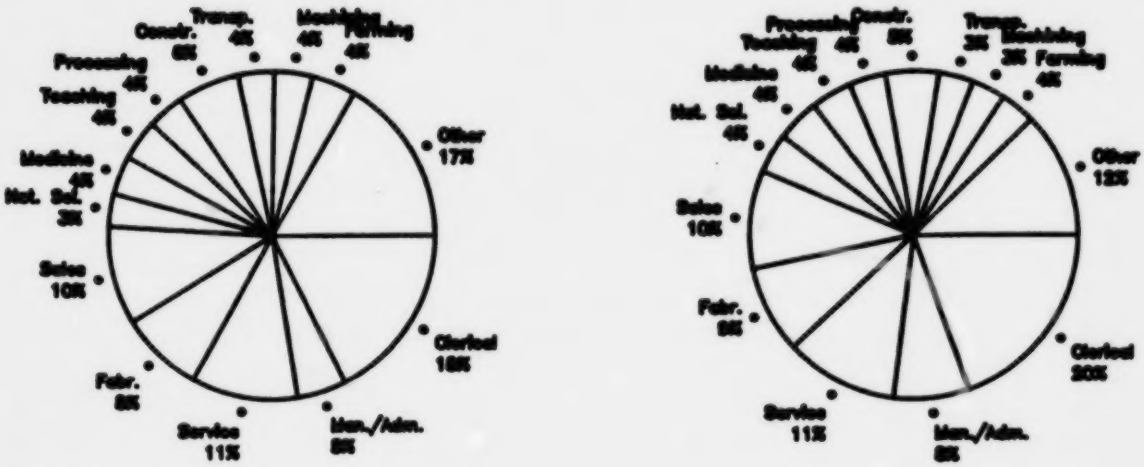


TABLE 5
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS FOR ALL INDUSTRIES, ONTARIO 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	154.1	84.0	16.0	4.9	314.4	74.3	25.7	7.5	104.0	56.3	160.31	15.9	7.4
21	NATURAL SCI.	101.0	92.9	7.1	3.2	160.8	86.7	13.3	3.9	45.7	14.2	59.88	5.9	4.8
23	SOCIAL SCI.	31.0	61.8	38.2	1.0	68.9	47.7	52.3	1.7	13.8	24.2	37.97	3.8	8.3
25	RELIGION	7.2	89.0	11.0	0.2	9.3	83.8	16.2	0.2	1.4	0.7	2.08	0.2	2.6
27	TEACHING	126.1	40.5	59.5	4.0	166.8	41.6	58.4	4.0	18.2	22.5	40.74	4.0	2.8
31	MEDICINE	121.2	24.8	75.2	3.8	175.2	21.5	78.5	4.2	7.6	46.4	53.96	5.3	3.8
33	ARTIST	26.3	71.6	28.4	0.8	51.3	60.5	39.5	1.2	12.2	12.8	25.00	2.5	6.9
37	SPORTS	5.2	71.5	28.5	0.2	10.2	53.6	46.4	0.2	1.8	3.2	5.08	0.5	7.0
41	CLERICAL	557.4	29.9	70.1	17.6	813.5	22.7	77.3	19.5	17.5	238.5	256.06	25.4	3.9
51	SALES	305.9	68.7	31.3	9.7	404.0	57.6	42.4	9.7	22.8	75.3	98.08	9.7	2.8
61	SERVICE	332.4	53.9	46.1	10.5	466.0	48.8	51.2	11.2	48.5	85.1	133.55	13.2	3.4
71	FARMING	138.5	77.2	22.8	4.4	145.6	74.7	25.3	3.5	1.8	5.3	7.14	0.7	0.5
73	FISHING	1.1	93.2	6.8	0.0	1.3	87.5	12.5	0.0	0.1	0.1	0.19	0.0	1.6
75	FORESTRY	9.7	94.5	5.5	0.3	10.2	89.5	10.5	0.2	-0.1	0.5	0.49	0.0	0.5
77	MINING	18.7	99.3	0.7	0.6	17.4	98.1	1.9	0.4	-1.5	0.2	-1.29	-0.1	-0.7
81	PROCESSING	114.3	81.8	18.2	3.6	151.6	79.7	20.3	3.6	27.4	9.9	37.33	3.7	2.9
83	MACHINING	118.7	92.7	7.3	3.8	137.2	90.6	9.4	3.3	14.3	4.2	18.51	1.8	1.5
85	FABRICATING	261.0	76.7	23.3	8.2	364.7	74.7	25.3	8.7	72.3	31.4	103.69	10.3	3.4
87	CONSTRUCTION	193.4	99.0	1.0	6.1	222.7	98.1	1.9	5.3	26.8	2.5	29.26	2.9	1.4
91	TRANSPORTATION	113.6	96.7	3.3	3.6	142.1	91.7	8.3	3.4	20.5	8.0	28.48	2.8	2.3
93	MAT. HANDLING	76.3	75.0	25.0	2.4	92.1	73.2	26.8	2.2	10.1	5.6	15.75	1.6	1.9
95	OTHER CRAFTS	43.4	86.9	13.1	1.4	55.0	78.9	21.1	1.3	5.7	5.9	11.60	1.1	2.4
99	OTHER OCC.	308.4	62.5	37.5	9.7	193.2	65.3	34.7	4.6	-66.8	-48.4	-115.17	-11.4	-4.6
	TOTAL	3164.9	64.4	35.6	100.0	4173.5	58.5	41.5	100.0	404.2	604.4	1008.60	100.0	2.8

FIGURE 6
DISTRIBUTION OF EMPLOYMENT BY OCCUPATION, ONTARIO, 1971 AND 1981



1971 1981

3.1 Occupational Distribution

- Occupational groups which have relatively large gains in their share of total employment between 1971 and 1981 include: Managerial and Administrative occupations; Clerical occupations; Natural Sciences, Engineering and Mathematics occupations; Social Science occupations; and Service occupations.

- Major occupational groups which have considerable losses in employment share during this period include: Farming occupations; Machining occupations; Construction Trade occupations.

- With the exception of Teaching occupations, females have gained in employment share in all occupational groups. Relatively large gains in employment share for females are particularly pronounced in Sports and Recreation occupations; Social Science occupations; Artistic, Literary and Performing Arts occupations; Sales occupations; and Managerial and Administrative occupations (see Table 5).

- Ninety-five percent of the occupational groups experienced a change in percentage occupational distribution that was less than 2.83 percent.

- Over half of the occupational groups experienced a change in percentage occupational distribution that was between +0.2 percent and -0.2 percent (See Appendix B).

TABLE 6
SUMMARY OF ANALYSIS OF EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS
FOR ALL INDUSTRIES, ONTARIO, 1971 - 1981

Occ. Code	Occupation	Employment Growth (000)	1981 Rank (Employment Share)	MAJOR CONTRIBUTORS TO EMPLOYMENT GROWTH[1]			HIGH GROWTH RATES (%)[2]		EMPLOYMENT SHARE (%)[3]	
				Total	Female	Male	Female	Male	Gained	Lost
41	Clerical	256.06	1	x	x					
11	Man. & Admin.	160.31	5	x	x	x	x	x	x	
61	Service	133.55	2	x	x	x			x	
85	Fabricating	103.69	4	x		x		x	x	
51	Sales	98.08	3	x	x		x			
21	Natural Sci.	59.88	9	x		x	x	x	x	
31	Medicine	53.96	7	x	x			x	x	
27	Teaching	40.74	8				x	x	x	
23	Social Sci.	37.97	15							x
81	Processing	37.33	10				x			x
87	Construction	29.26	6			x			x	
91	Transportation	28.48	12			x				x
33	Artist	25.00	17				x	x		x
83	Machining	18.51	13							x
93	Mat. Handling	15.75	14							x
95	Other Crafts	11.60	16							x
71	Farming	7.14	11							x
37	Sports	5.00	20							x
25	Religion	2.08	21							x
75	Forestry	0.49	19							x
73	Fishing	0.19	22							x
77	Mining	(1.2)	18							x
99	Other Occup.	(115.17)								
-	All Occupations	1008.60								

1 Together accounted for 80 percent of total employment growth for that column.
2 Growth rates significantly higher than the average for that column.
3 Gain or loss in share as a result of higher and lower than average employment growth rate.

3.2 Occupational Employment Growth

- Of the 1,008,600 new jobs created over the 1971-1981 period, 6 occupational groups together account for 811,570 jobs (80.5 percent). These occupational groups are: Clerical occupations (256,060); Managerial and Administrative occupations (160,310); Service occupations (133,550); Fabricating, Assembling and Machining occupations (103,690); Sales occupations (98,080); Natural Sciences, Engineering and Mathematics occupations (59,880).

- Within these 6 occupational groups, females occupied 500,800 of the new jobs, or approximately 82.9 percent of the job gains for all females over the period.

- Job gains for females are particularly pronounced in the following occupational groups: Clerical occupations (93.1 percent); Medical and Health occupations (86 percent); Sales occupations (76.8 percent); Social Sciences occupations (63.7 percent); and Teaching occupations (52.2 percent).

- Job gains for males are particularly prevalent in the following occupational groups: Construction Trades occupations (91.6 percent); Machining occupations (77.3 percent); Natural Sciences, Engineering and Mathematics (76.3 percent); Processing occupations (73.4 percent); Transportation Equipment Operating occupations (72 percent); Fabricating, Assembling and Repairing occupations (69.7 percent).

FIGURE 7
EMPLOYMENT GROWTH BY OCCUPATION AND SEX, ONTARIO, 1971 - 1981

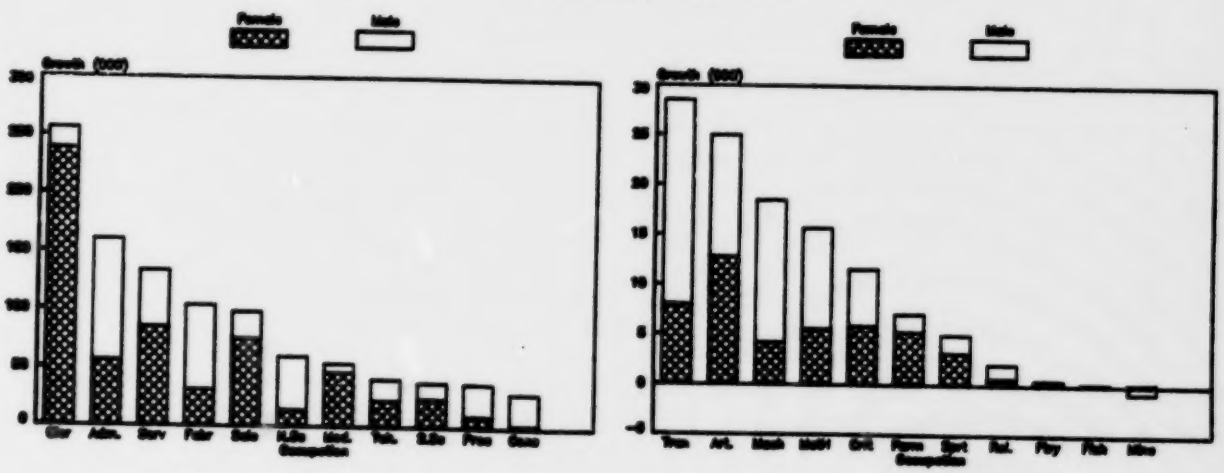


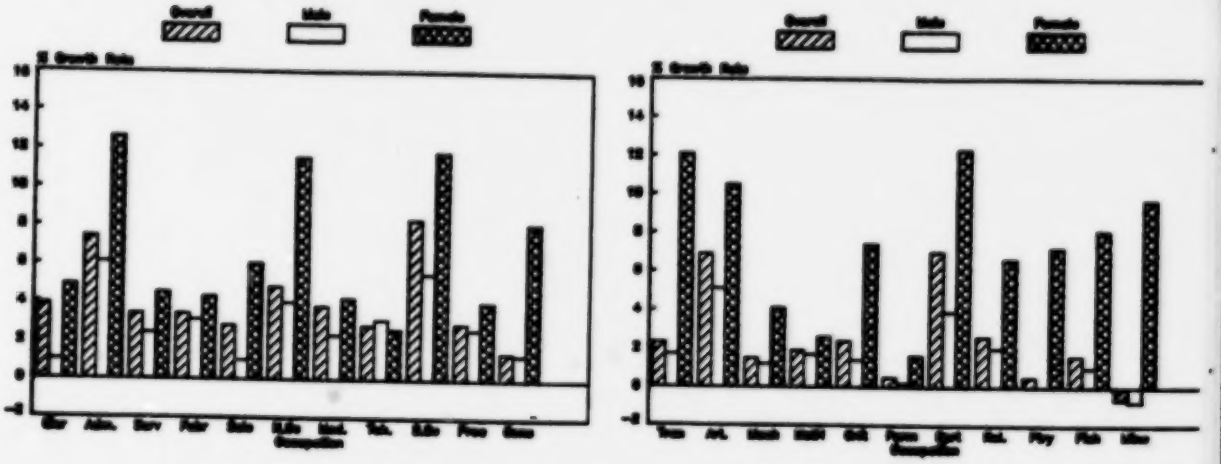
TABLE 7

ANALYSES OF EMPLOYMENT SHARE BY 2 DIGIT OCCUPATIONAL GROUPS, 1971-1981

(Ranked by Employment Growth)

Occ. Code	Occupation	Employment Growth(000) 1971-1981	PERCENTAGE GROWTH RATES		
			Gain in Share	No Change in Share	Loss in Share
41	Clerical	256.1	3.9		
11	Man. & Admin.	160.3	7.4		
61	Service	133.6	3.4		
85	Fabricating	103.7	3.4		
51	Sales	98.1		2.8	
21	Natural Sci.	59.9	4.8		
31	Medicine	54.0	3.8		
27	Teaching	40.7		2.8	
23	Social Sci.	38.0	8.3		
81	Processing	37.3	2.9		
87	Construction	29.3			1.4
91	Transportation	28.5			2.3
33	Artist	25.0	6.9		
83	Machining	18.5			1.5
93	Mat. Handling	15.8			1.9
95	Other Crafts	11.6			2.4
71	Farming	7.1			0.5
37	Sports	5.0	7.0		
25	Religion	2.1			2.6
75	Forestry	0.5			0.5
73	Fishing	0.2			1.6
77	Mining	(1.3)			(0.7)
99	Other Occup.	(115.2)			(4.6)
-	All Occupations	1008.6		2.8	

FIGURE 8
EMPLOYMENT GROWTH RATES (%) BY OCCUPATION AND SEX, ONTARIO, 1971 - 1981



3.3 Occupational Employment Growth Rates

- Between 1971 and 1981, the overall employment growth rate for all occupations is approximately 2.8 percent per year.

- Social Sciences occupations have experienced the highest annual employment growth rate (8.3 percent), followed by Managerial and Administrative occupations (7.4 percent), Sports and Recreation occupations (7 percent), and Artistic, Literary and Performing Arts occupations (6.9 percent).

- Mining occupations have experienced negative annual employment growth rates over this period (-0.7 percent). Other occupational groups with lower than average employment growth rates include: Forestry occupations and Farming occupations (both 0.5 percent), Construction Trades occupations (1.4 percent), and Machining occupations (1.5 percent).

- With the exception of Teaching occupations, females have higher employment growth rates than males in every major occupational group over this period.

- As a result of varying employment growth rates among different occupational groups, 10 occupational groups have gained in their share of total employment, while 11 have lost (see Table 7).

TABLE 8

4 DIGIT OCCUPATIONS WITH A TOTAL EMPLOYMENT (1981) OF AT LEAST 20,000 IN ALL INDUSTRIES

OCC CODE	OCCUPATION	1981 TOTAL EMPLOYED (000)	1971-1981 GROWTH (000)
4131	Bookkeepers	146.3	59.0
5135	Salespersons Com: Nec	164.3	47.2
4133	Cashiers & Tellers	84.4	40.1
4111	Secretaries & Steno	130.8	37.7
6125	Waiters	74.4	31.3
1137	Sales Mgmt Occs	32.2	27.0
1149	Mgmt: Nec	35.4	25.6
3131	Nurse. Grad. Nonsuper	63.1	24.3
4143	EDP Equip Operators	34.9	22.0
6121	Chefs & Cooks	43.7	21.2
1171	Financial Officers	59.0	19.9
5133	Commercial Traveller	39.7	18.9
1135	Mgrs: Financial	21.4	18.6
2183	Systems Analysts	28.6	17.2
1143	Production Mgmt Occs	20.0	16.5
8584	Indust. Farm Mechanics	33.8	14.9
4171	Receptionists	32.0	14.6
4155	Stock Clerks	37.8	14.4
6120	Superv: Food. Bev Prep	27.6	13.4
9175	Truck Drivers	84.3	13.2
6198	Labour Services	30.9	12.4
5172	Real Estate Sales	23.3	12.3
6191	Janitors	80.5	12.1
4153	Shipping Clerks	40.4	11.7
4197	Gen Off Clerks	48.0	10.6
8335	Welding	35.5	9.6
6115	Guards & Oth. Sec	26.1	9.5
2731	Elem. & Kind. Teachers	65.8	9.4
2165	Engineering Techn	19.8	9.1
7195	Nursery Workers	23.6	8.4
8581	Auto Mechanics	48.2	7.9
2733	Secondary Teachers	43.2	7.6
5171	Insurance Sales	20.0	6.3
8780	Superv: Other Constr	26.7	6.1
8563	Sewing Machine Occs	25.1	6.0
8513	Auto Fab. Assm: Nec	21.2	5.2
6112	Police Officers: Govt	20.1	5.2
9317	Packing Occs: Nec	33.1	4.7
5130	Superv: Sales. Com	95.6	3.1
6143	Hairdressers	23.7	2.7
4199	Other Clerical: Nec	34.4	2.5
8781	Carpenters	31.0	2.1
8313	Machinist	20.6	2.1
3135	Nursing Attendants	23.2	1.9
1130	General Managers	21.6	1.7
7112	Farmers	56.5	1.6
8798	Labour: Other Constr	22.2	0.2
4113	Typists & Clerk-Typ	41.4	(.3)
7182	Farm Occs: Nec	49.2	(7.6)

3.4 MAJOR FOUR-DIGIT OCCUPATIONS

- There are forty-nine 4-digit occupations which had at least 20,000 employed in all industries in Ontario in 1981. Together they accounted for about 2.24 million jobs or about 53.7 percent of total employment in 1981 (see Table 8).

- The five 4-digit occupations with the most employed are commission salespersons, not elsewhere classified; bookkeepers; secretaries and stenographers; commission salesperson supervisors; and cashiers and tellers. Together they represented 215,300 jobs or about 21 percent of total employment in Ontario in 1981.

- Employment for these 49 occupations between 1971-1981 grew by about 645,000 or about 65 percent of total employment growth over this period.

- The five 4-digit occupations which had the largest employment growth over the 1971-1981 period are bookkeepers; commission salespersons, not elsewhere classified; cashiers and tellers; secretaries and stenographers; and waiters. Together these five 4-digit occupations accounted for 21.3 percent of the total employment growth which occurred over this period.

- Of these selected 4-digit occupations with at least 20,000 employed in 1981, clerical occupations as a group, accounted for about 21 percent of total employment growth over the 1971-1981 period, followed by Managerial, Administrative and Related occupations (10.8 percent), Service occupations (10.7 percent), Product Fabricating, Assembling and Repairing occupations (3.4 percent), Natural Sciences, Engineering and Mathematics occupations (2.6 percent).

4.0 OCCUPATIONAL EMPLOYMENT TRENDS BY INDUSTRY SECTOR

The following sections present changes in occupational employment for each of the 23 industry sectors in Ontario. The occupational data are presented and analyzed first on the 2-digit CCDO level (Canadian Classification and Dictionary of Occupations). The distribution of major occupational groups, their employment growth and employment growth rates by sex over the 1971-1981 period, are shown for each industry sector.

Occupational groups which contain the most employment for each industry sector have been selected for detailed analysis. (Each occupational group selected has greater than 4.5% of employment share in 1981 in that industry.) Graphical presentation is limited to the major occupational groups, but the analysis, however, includes other occupational groups that have exhibited significant employment growth between 1971 and 1981. The selected occupational groups in all cases account for at least 75% of total employment in that industry (detailed occupational employment data by each of 23 industry-sectors are provided in Appendix C).

Major 4-digit occupations within the selected 2-digit occupational groups are also tabulated for each industry sector. The 4-digit occupations were selected on either one of the following two criteria: (1) at least 5% employment share in 1981 within the 2-digit occupational group, or (2) at least 5% change in employment within the 2-digit occupational group and an employment level in 1981 of at least one hundred. This ensures the selection of the major occupations as well as occupations with significant employment growth.

The table with selected 4-digit occupations shows the employment level and employment share in 1981, the breakdown of employment growth between 1971 and 1981 by sex, the compounded annual employment growth rate, and the gain or loss in employment share within the 2-digit occupational group. A summary of the selected 4-digit occupations is provided in Appendix D.

4.1 Agriculture, Fishing and Trapping

This sector employed 135,500 persons in 1981, approximately 3.2 percent of total employment in Ontario. Since this sector's annual employment growth rate (0.6 percent) is lower than the overall annual employment growth rate (2.8 percent) for all industries in Ontario, the employment share of this sector has declined from 4 percent in 1971 to 3.2 percent in 1981. This sector created 7,640 new jobs over the 1971-1981 period, accounting for 0.8 percent of total employment growth in the province.

Farming occupations are the most dominant occupational group in this sector. In addition, Clerical occupations and Medical and Health occupations also have high employment growth between 1971 and 1981. These occupations together account for almost 94 percent of total employment in the industry.

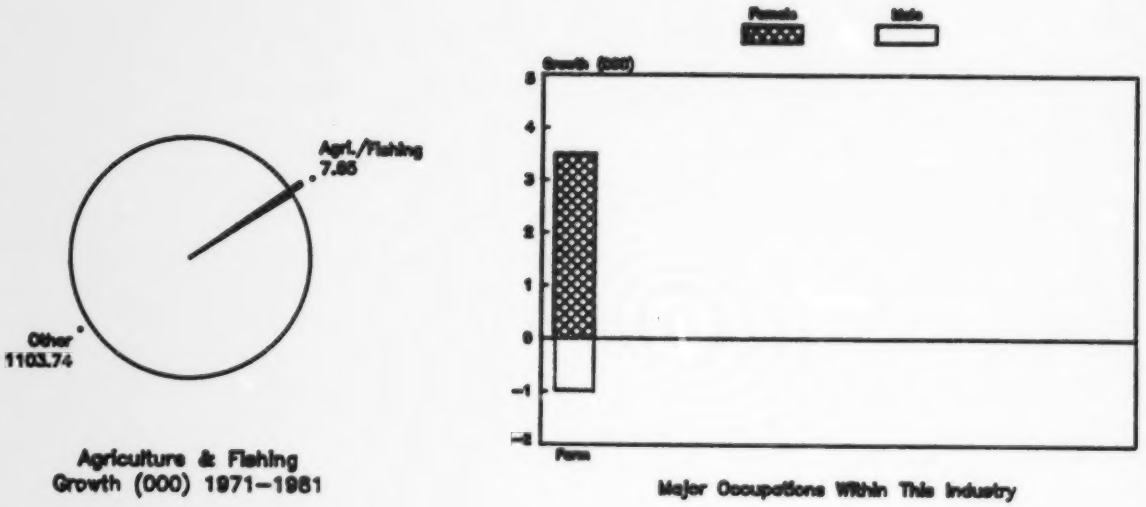
4.1.1 Occupational Distribution Within the Industry

- Farming occupations are highly concentrated in this sector; they alone account for almost 90 percent of total employment. Consequently, the employment concentration of other occupational groups in this industry is substantially lower.

- In this sector, the employment concentration of males (70.2 percent) is also higher than that of the overall average (58.5 percent) for all industries.

FIGURE 9
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY, ONTARIO, 1981

FIGURE 10
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY, ONTARIO, 1971 - 1981



4.1.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, total employment in this sector increased by 7,640, about 900 for men and 6,700 for females.
- Farming occupations are the largest contributor to employment growth (2,490), followed by Clerical occupations (2,040), and Medical and Health occupations (950).
- Although females account for approximately 30 percent of employment in this sector, they make up almost 88 percent of the job gains over this period.
- In the case of Farming occupations and Medical and Health occupations, employment for males has declined over the 10 year period.

4.1.3 Occupational Employment Growth Rates Within the Industry

- Among the major occupational groups, Clerical occupations have the highest annual employment growth rate (9.1 percent), followed by Medical and Health occupations (7.3 percent).
- The employment growth rates for females in these occupations are much higher than those for males.
- As a result of higher than average rates of employment growth, Clerical occupations and Medical and Health occupations have gained in employment share within this sector.
- Conversely, Farming occupations have lost in employment share within the sector from 93.3 percent in 1971 to 89.9 percent in 1981.
- On balance, however, the sector has lost in employment share among the 23 industry sectors.

FIGURE 11
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY, ONTARIO, 1971 - 1981

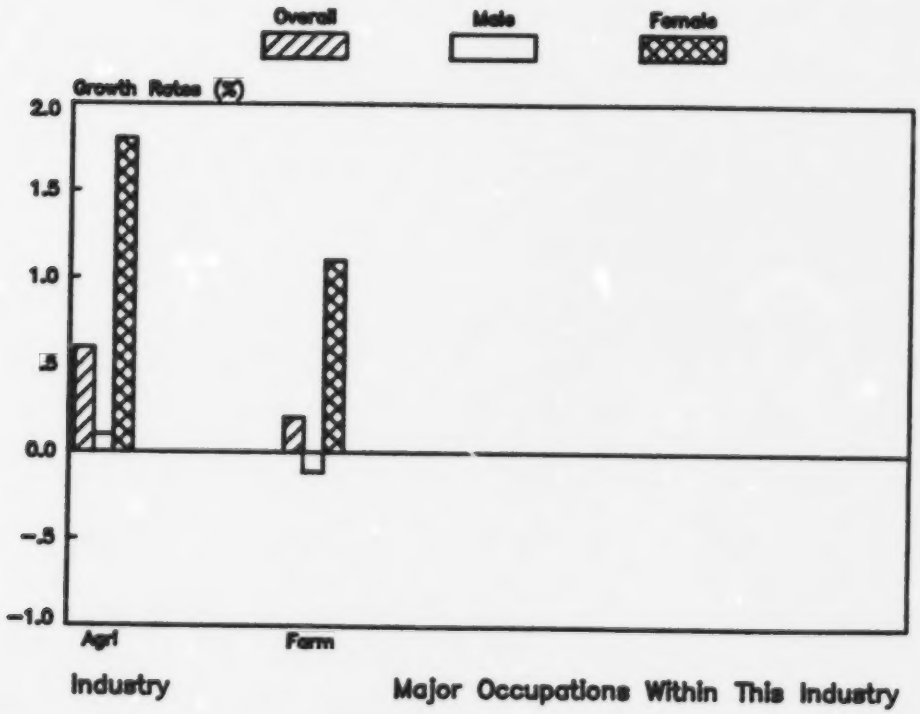


TABLE 9
SELECTED 4-DIGIT OCCUPATIONS IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
31	MEDICINE							
3115	VETERINARIANS	1025	54.5	235	180	415	5.3	LOSS
3159	MED OCCS:NEC	760	40.4	-10	495	485	10.7	GAIN
MEDICINE	TOTAL	1880	100.0	245	710	955	7.3	
41	CLERICAL							
4111	SECRETARIES & STENO	455	12.9	-15	210	195	5.8	LOSS
4131	BOOKKEEPERS	1755	49.9	5	1325	1330	15.2	GAIN
4133	CASHIERS & TELLERS	230	6.5	5	185	190	19.1	GAIN
4171	RECEPTIONISTS	420	11.9	5	170	175	5.5	LOSS
4197	GEN OFF CLERKS	225	6.4	10	105	115	7.4	LOSS
CLERICAL	TOTAL	3515	100.0	-25	2065	2040	9.1	
71	FARMING							
7112	FARMERS	56485	46.4	-4600	6230	1630	0.3	GAIN
7131	FARM MGMT	9055	7.4	2200	1495	3695	5.4	GAIN
7180	SUPERV FARMING	3655	3.0	2380	390	2770	15.2	GAIN
7182	FARM OCCS:NEC	46740	38.4	-3440	-5855	-9295	-1.8	LOSS
7195	NURSERY WORKERS	2855	2.3	850	835	1685	9.3	GAIN
7197	FARM MACH OPERATOR	3070	2.5	1605	400	2005	11.2	GAIN
FARMING	TOTAL	121860	100.0	-1005	3495	2490	0.2	

4.2 Forestry

There were 12,200 persons employed in the Forestry industry in 1981. Forestry remains the second smallest employer in Ontario, although its employment share has increased slightly from 0.2 percent in 1971 to 0.3 percent in 1981. The gain in employment share is the result of higher annual employment growth rate (5.3 percent) over this period, compared with the annual aggregate employment growth rate of 2.8 percent for all industries.

Five occupational groups are dominant in this sector; they together account for almost 80 percent of total employment. These major occupational groups are: Forestry and Logging occupations; Natural Sciences, Engineering and Mathematics occupations; Clerical occupations; Fabricating, Assembling and Repairing occupations; and Transport Equipment Operating occupations.

4.2.1 Occupational Distribution Within the Industry

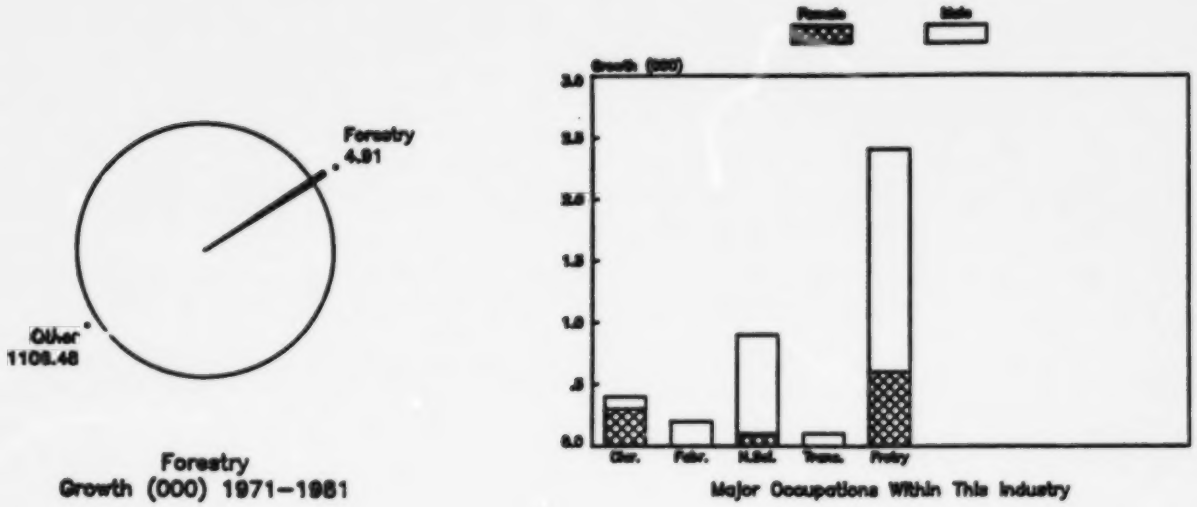
- Forestry and Logging occupations are highly concentrated in this sector; they alone account for approximately 55.9 percent of total employment.

- When compared with the overall occupational distribution for all industries, higher employment concentration in this sector is also apparent for Natural Sciences, Engineering and Mathematics occupations and Transport Equipment Operating occupations.

- Males account for almost 85 percent of total employment in the industry, which is considerably higher than the overall average of 58.5 percent for all industries.

FIGURE 12
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE FORESTRY INDUSTRY, ONTARIO, 1981

FIGURE 13
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE FORESTRY INDUSTRY, ONTARIO, 1971 - 1981



4.2.2 Occupational Employment Growth Within the Industry

- This sector created 4,910 new jobs over the 1971-1981 period, 3,600 for males and 1,300 for females.
- Forestry and Logging occupations are the major contributor of employment gains (2,430), followed by Natural Sciences, Engineering and Mathematics (910).
- Employment for Natural Sciences, Engineering and Mathematics occupations has increased more than 5 times during this period.

4.2.3 Occupational Employment Growth Rates Within the Industry

- Among the largest occupations in this sector, Natural Sciences, Engineering and Mathematics occupations have the highest annual employment growth rate (18 percent), followed by Clerical occupations (10.4 percent).

- With the exception of Fabricating, Assembling and Repairing occupations and Transport Equipment Operating occupations, the employment growth rates for females are much higher than those for males.

- As a result of higher than average annual employment growth rates, the following occupational groups have gained in employment share within this sector: Natural Sciences, Engineering and Mathematics occupations; Clerical occupations; Fabricating, Assembling and Repairing occupations.

- Conversely, Forestry and Logging occupations and Transport Equipment Operating occupations have lost in employment share.

- In the aggregate, Forestry has gained in employment share among the 23 industry sectors.

FIGURE 14
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE FORESTRY INDUSTRY, ONTARIO, 1971 - 1981

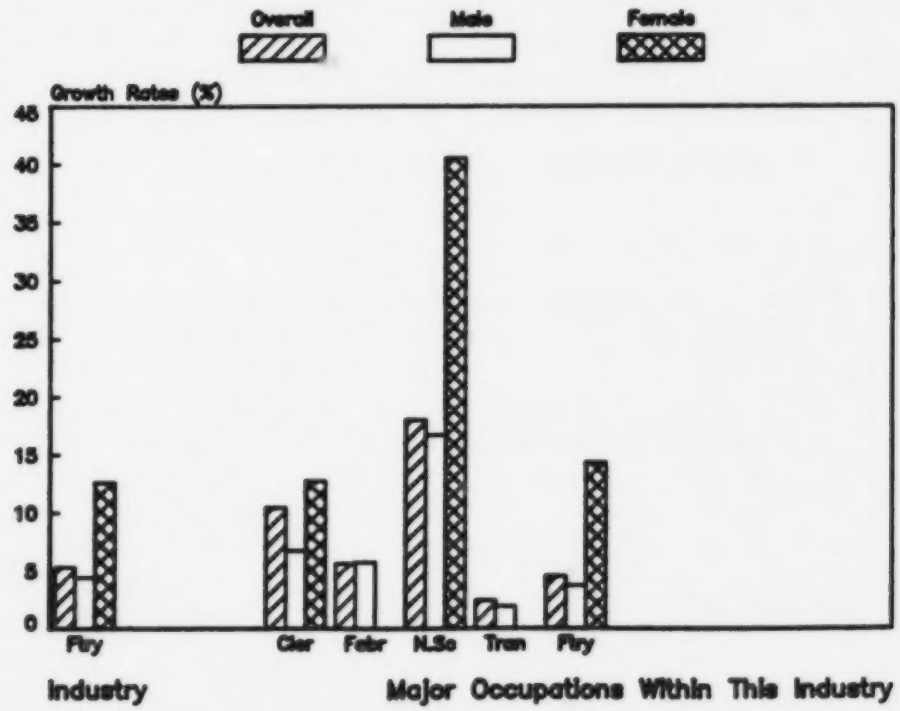


TABLE 10
SELECTED 4-DIGIT OCCUPATIONS IN THE FORESTRY INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
21	NATURAL SCI.							
2131	AGRICULTURALISTS	575	50.9	410	40	450	16.5	LOSS
2135	LIFE SCIENCES TECHN	230	20.4	165	35	200	22.6	GAIN
NATURAL SCI.	TOTAL	1130	100.0	770	145	915	18.0	
41	CLERICAL							
4131	BOOKKEEPERS	245	38.9	20	150	170	12.6	GAIN
CLERICAL	TOTAL	630	100.0	95	300	395	10.4	
75	FORESTRY							
7510	SUPERV FORESTRY & LOG	865	12.7	295	65	360	5.5	GAIN
7511	FORESTRY CONSERV	660	9.7	195	125	320	6.9	GAIN
7513	TIMBER CUTTING	2055	30.2	365	35	400	2.2	LOSS
7517	LOG HOISTING	1150	16.9	725	5	730	10.6	GAIN
7518	LABOUR:FORESTRY	1275	18.8	30	360	390	3.7	LOSS
7519	FORESTRY.LOGGING:NEC	655	9.6	130	15	145	2.5	LOSS
FORESTRY	TOTAL	6800	100.0	1820	605	2425	4.5	
85	FABRICATING							
8584	INDUST.FARM MECHANICS	330	57.4	195	0	195	9.3	GAIN
FABRICATING	TOTAL	575	100.0	240	0	240	5.6	
91	TRANSPORTATION							
9175	TRUCK DRIVERS	520	82.5	70	20	90	1.9	LOSS
TRANSPORTATION	TOTAL	630	100.0	105	30	135	2.4	

4.3 Mineral Fuel Mines and Wells

There were 1,700 persons employed in this sector in 1981, approximately 0.04 percent of total employment in Ontario. Employment in this sector increased by about 6.7 percent per year over the 1971-1981 period, which is higher than the annual aggregate employment growth rate (2.8 percent) for all industries. Notwithstanding higher than average employment growth in the last 10 years, this sector remains as the smallest employer in the province.

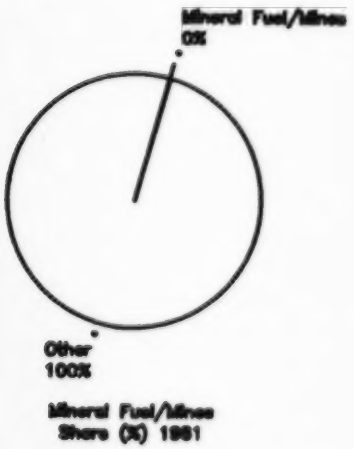
Four occupational groups are dominant in this sector, together they account for approximately 77.5 percent of total employment. They are: Clerical occupations; Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; and Mining occupations.

4.3.1 Occupational Distribution Within the Industry

- Clerical occupations are highly represented in this sector; they alone account for almost 38 percent of total employment. Managerial and Administrative occupations and Natural Sciences, Engineering and Mathematics occupations together account for another one-third of total employment.

- With the exception of mining occupations, where males are particularly prevalent, the occupational distribution between males and females in this sector is very close to the overall average for all industries.

FIGURE 15
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE MINERAL FUEL MINE & WELLS INDUSTRY, ONTARIO, 1981



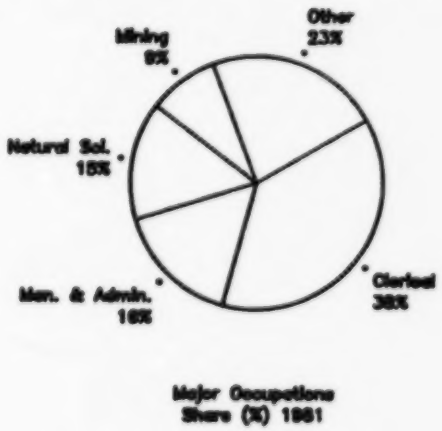
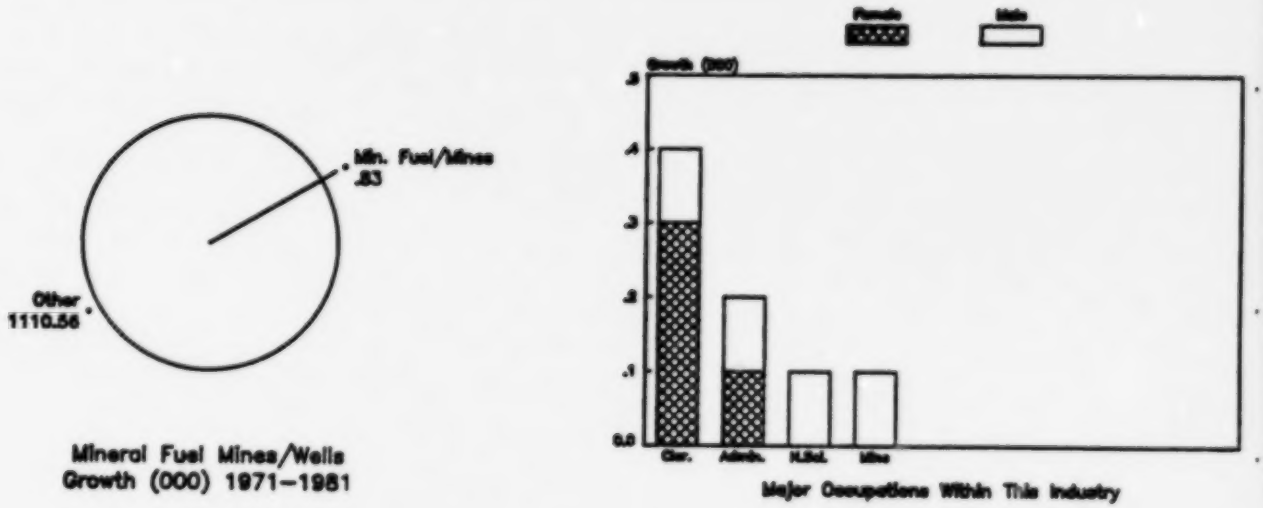


FIGURE 16
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE MINERAL FUEL MINE & WELLS INDUSTRY, ONTARIO, 1971 - 1981



4.3.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, total employment in this sector increased by 830 jobs, which are evenly shared between males and females.

- Clerical occupations are the largest contributor to employment growth (44.6 percent), followed by Managerial and Administrative occupations (22.9 percent), and Natural Sciences, Engineering and Mathematics occupations (15.1 percent).

- Males account for all the new jobs created in the Mining occupations and Natural Science, Engineering and Mathematics occupations.

4.3.3 Occupational Employment Growth Rates Within the Industry

- Among the major occupational groups, Managerial and Administrative occupations have the highest annual employment growth rate (12 percent), followed by Mining occupations (10.9 percent).
- With the exception of Mining occupations, the employment growth rates for females are much higher than those for males.
- As a result of higher than average employment growth rates, all four major occupational groups have gained in employment share within the sector.
- For the industry as a whole, this sector has gained marginally in employment share among the 23 industry sectors.

FIGURE 17
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE MINERAL FUEL MINE & WELLS INDUSTRY, ONTARIO, 1971 - 1981

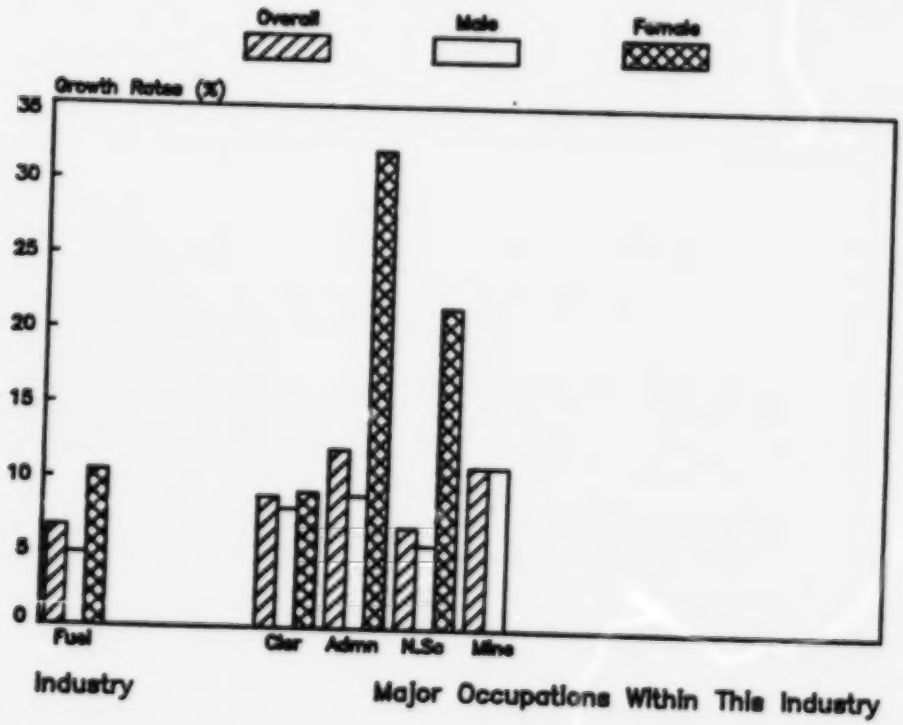


TABLE 11
SELECTED 4-DIGIT OCCUPATIONS IN THE MINERAL FUEL MINES & WELLS INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1171	FINANCIAL OFFICERS	125	44.6	55	55	110	23.6	GAIN
MAN. & ADMIN.	TOTAL	280	100.0	115	75	190	12.0	
21	NATURAL SCI.							
NATURAL SCI.	TOTAL	260	100.0	95	30	125	6.8	
41	CLERICAL							
4131	BOOKKEEPERS	260	40.0	60	155	215	19.2	GAIN
CLERICAL	TOTAL	650	100.0	105	265	370	8.8	
77	MINING							
MINING	TOTAL	155	100.0	100	0	100	10.9	

4.4 Other Mines and Quarries

This sector employed 37,900 persons in 1981, approximately 0.9 percent of total employment in Ontario. Since this sector has almost no employment growth in the last 10 years, the employment share of this sector has dropped slightly from 1.2 percent in 1971 to 0.9 percent in 1981.

The five largest occupational groups in this sector are: Mining and Quarrying occupations; Fabricating, Assembling and Repairing occupations; Natural Sciences, Engineering and Mathematics occupations; Clerical occupations; and Construction Trades occupations. In addition, Managerial and Administrative occupations also have high employment growth in this period. Together, these 6 occupational groups account for approximately 76.5 percent of total employment.

4.4.1 Occupational Distribution Within the Industry

- Mining and Quarrying occupations are particularly concentrated in this sector, accounting for almost 39 percent of total employment. Almost all of the workers (98.3 percent) in this occupational group are males.

- Males account for more than 91 percent of total employment in this sector, which is considerably higher than the overall industry average of 58.5 percent.

- When compared with the overall occupational distribution for all industries, higher male employment concentration is prevalent in the other five occupational groups.

FIGURE 18
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO, 1981

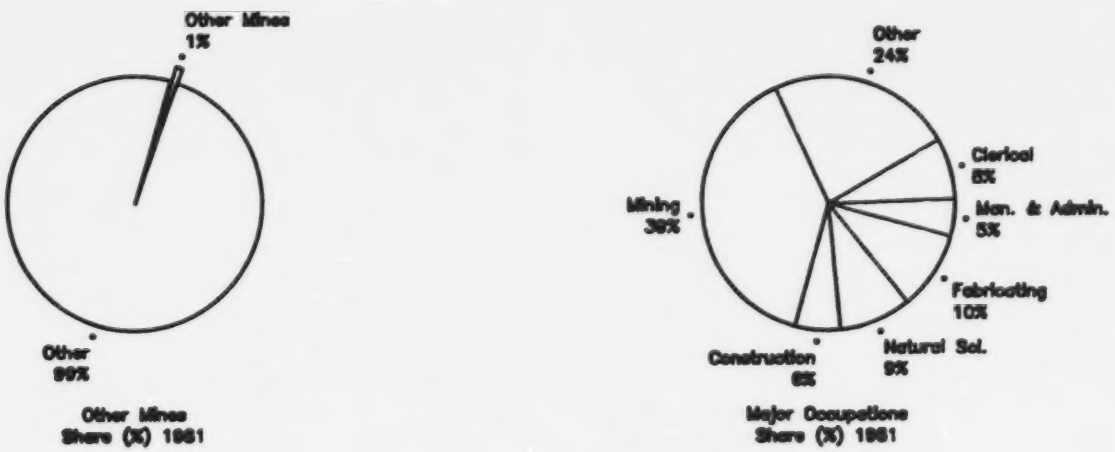
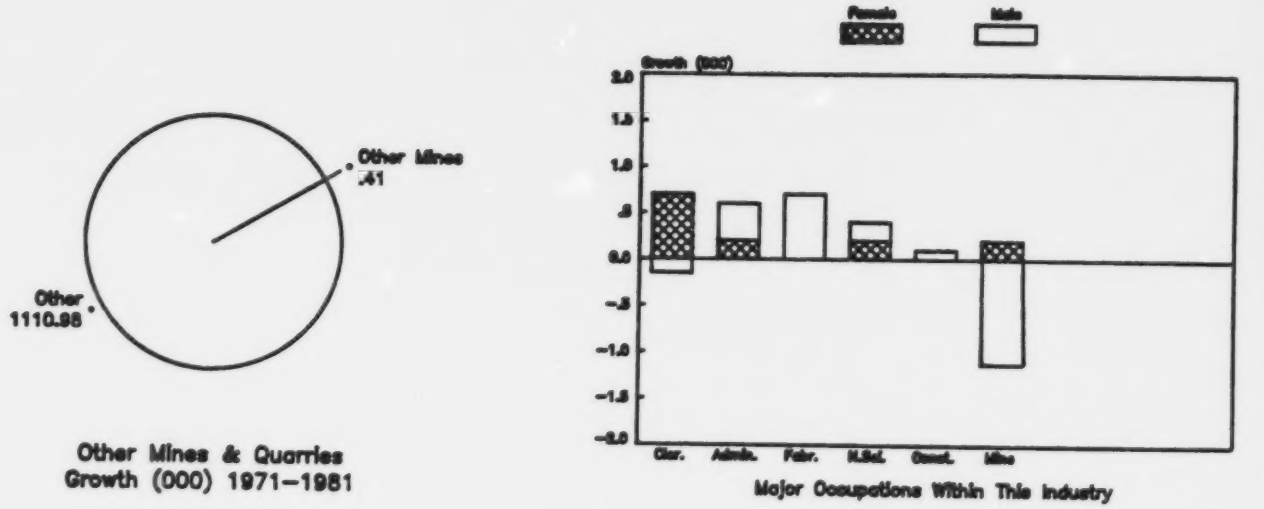


FIGURE 19
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO, 1971 - 1981



4.4.2 Occupational Employment Growth Within the Industry

- Employment rose by about 410 in this sector between 1971 and 1981. Females account for 1,500 new jobs, while males have lost 1,100 in employment.

- With the exception of Mining and Quarrying occupations, all the major occupational groups have gained in employment during this period.

- The remaining occupational groups in this sector have either little or negative employment growth.

4.4.3 Occupational Employment Growth Rates Within the Industry

- The annual employment growth rate for this industry sector is close to zero (0.1 percent).
- Managerial and Administrative occupations have experienced the highest rate of employment growth (4.0 percent), followed by Fabricating, Assembling and Repairing occupations (2 percent).
- With the exception of Fabricating, Assembling and Repairing occupations, employment growth rates for females are higher than those for males.
- All of the 6 occupational groups have gained in employment share within the sector because of higher than average employment growth rates, with the exception of Mining and Quarrying occupations.
- On balance, this sector has lost in employment share among the 23 industry sectors.

FIGURE 20
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO, 1971 - 1981

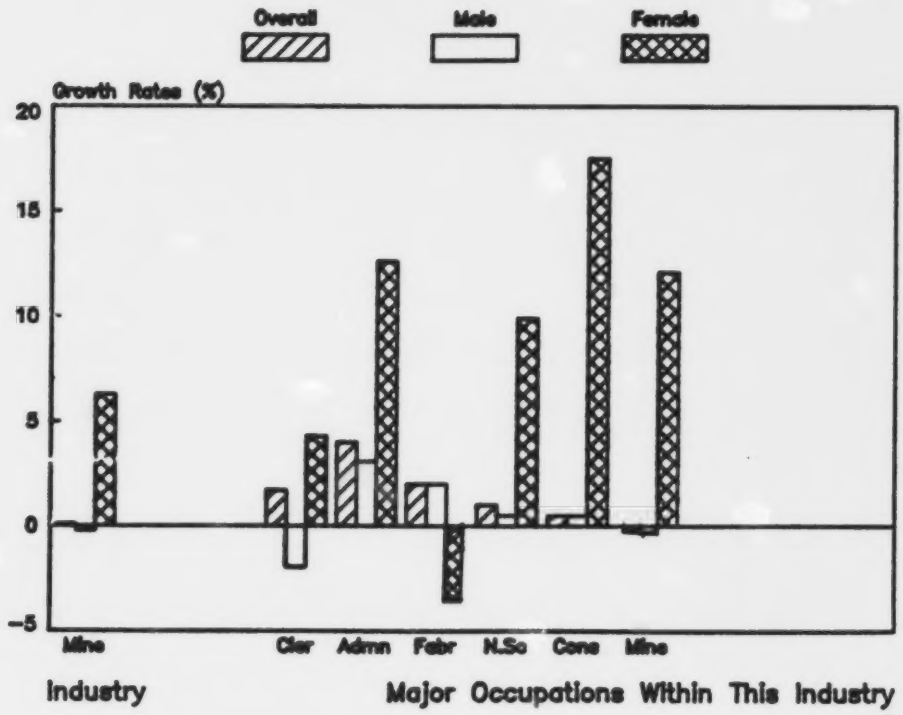


TABLE 12
SELECTED 4-DIGIT OCCUPATIONS IN THE OTHER MINES & QUARRIES INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	165	9.6	-35	-5	-40	-2.1	LOSS
1131	MANAGERS:NATURAL SCI	105	6.1	65	5	70	11.6	GAIN
1149	MGMT: NEC	445	25.9	225	60	285	10.8	GAIN
1171	FINANCIAL OFFICERS	345	20.1	50	35	85	2.9	LOSS
1174	PERSONNEL & REL OFF.	120	7.0	-25	20	-5	-0.4	LOSS
MAN. & ADMIN.	TOTAL	1720	100.0	395	160	555	4.0	
21	NATURAL SCI.							
2112	GEOLOGISTS	425	12.5	40	15	55	1.4	GAIN
2117	PHYSICAL SCI TECHN	460	13.5	25	65	90	2.2	GAIN
2119	OCCS PHYS SCI:NEC	125	3.7	-125	-5	-130	-6.9	LOSS
2153	MINING ENGINEERS	620	18.2	65	15	80	1.4	GAIN
2161	SURVEYORS	365	10.7	80	10	90	2.9	GAIN
2163	DRAUGHTING OCCUPATIONS	245	7.2	85	-5	80	4.0	GAIN
2165	ENGINEERING TECHN	320	9.4	85	45	130	5.4	GAIN
2183	SYSTEMS ANALYSTS	195	5.7	65	30	95	6.9	GAIN
NATURAL SCI.	TOTAL	3410	100.0	155	165	320	1.0	
41	CLERICAL							
4111	SECRETARIES & STENO	680	22.8	-30	110	80	1.3	LOSS
4113	TYPISTS & CLERK-TYP	230	7.7	-20	55	35	1.7	LOSS
4131	BOOKKEEPERS	730	24.5	-105	230	125	1.9	GAIN
4143	EDP EQUIP OPERATORS	210	7.0	35	85	120	8.8	GAIN
4155	STOCK CLERKS	220	7.4	-15	25	10	0.5	LOSS
4197	GEN OFF CLERKS	150	5.0	-40	25	-15	-0.9	LOSS
CLERICAL	TOTAL	2985	100.0	-235	690	455	1.7	
77	MINING							
7710	SUPERV MINING	2455	16.7	-155	10	-145	-0.6	GAIN
7713	ROCK SOIL DRILLING	3065	20.8	-620	25	-595	-1.8	LOSS
7715	BLASTING OCCS	265	1.8	-120	10	-110	-3.4	LOSS
7717	MINING:CUTTING	4870	33.1	75	55	130	0.3	GAIN
7718	LABOUR:MINING	2565	17.4	120	105	225	0.9	GAIN
7719	MINING:NEC	1325	9.0	-450	-35	-485	-3.1	LOSS
MINING	TOTAL	14710	100.0	-1090	170	-920	-0.6	
85	FABRICATING							
8580	SUPERV:MECHANICS	270	7.0	130	0	130	6.8	GAIN
8581	AUTO MECHANICS	160	4.2	-175	0	-175	-7.1	LOSS
8584	INDUST.FARM MECHANICS	2970	77.0	790	15	805	3.2	GAIN
FABRICATING	TOTAL	3855	100.0	695	-10	685	2.0	
87	CONSTRUCTION							
8711	EXCAVATING.GRADING	410	18.1	175	5	180	6.0	GAIN
8730	SUPERV:ELEC POWER	165	7.3	65	0	65	5.1	GAIN
8733	CONSTR ELECTRICIANS	740	32.6	-90	10	-80	-1.0	LOSS
8781	CARPENTERS	255	11.2	25	0	25	1.0	GAIN
8791	PIPEFITTING.PLUMBING	245	10.8	-20	-5	-25	-1.0	LOSS
CONSTRUCTION	TOTAL	2270	100.0	100	20	120	0.5	

4.5 Food, Feed, Beverage and Tobacco

In 1981, this industry sector employed 95,100 persons, approximately 2.3 percent of total employment in Ontario. Employment in this sector increased by about 1.3 percent per year over the 1971-1981 period, which is lower than the overall average of about 2.8 percent per year for all industries. Consequently, this sector's employment share has dropped marginally from 2.6 percent in 1971 to 2.3 percent in 1981.

The five largest occupational groups in this sector are: Processing occupations; Material Handling occupations; Sales occupations; Clerical occupations; and Managerial and Administrative occupations. In addition, Fabricating, Assembling and Repairing occupations also have significant employment contribution over this period. Together, these 6 occupational groups account for about 82.1 percent of total employment.

4.5.1 Occupational Distribution Within the Industry

- Processing occupations and Material Handling occupations are highly concentrated in this sector. These two occupational groups also show high employment concentration of females when compared with the overall average for all industries.

- In contrast, males have high employment concentration in Sales occupations, Clerical occupations, and Fabricating, Assembling and Repairing occupations.

- The occupational distribution of Sales occupations has dropped substantially from 14.9 percent in 1971 to 9.4 percent in 1981.

FIGURE 21
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO, 1981

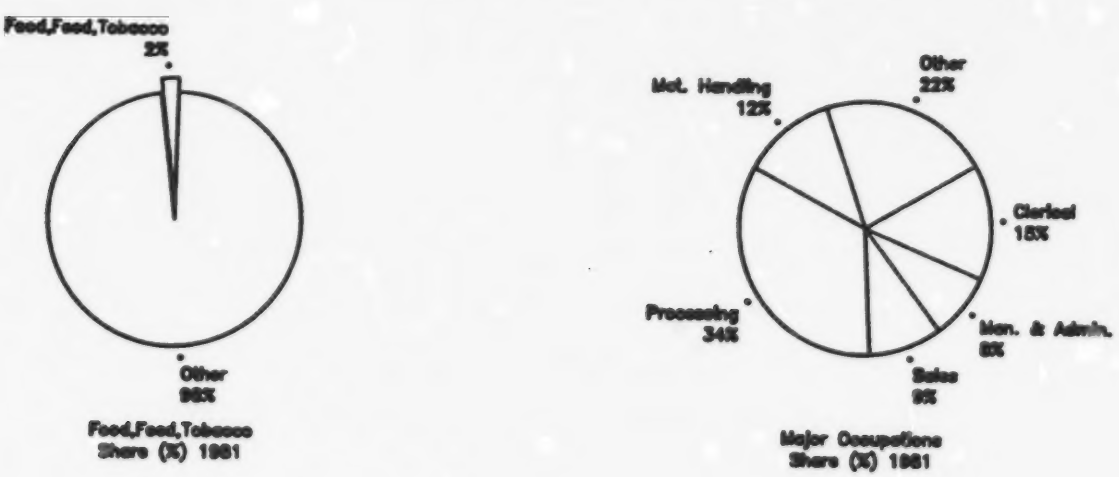
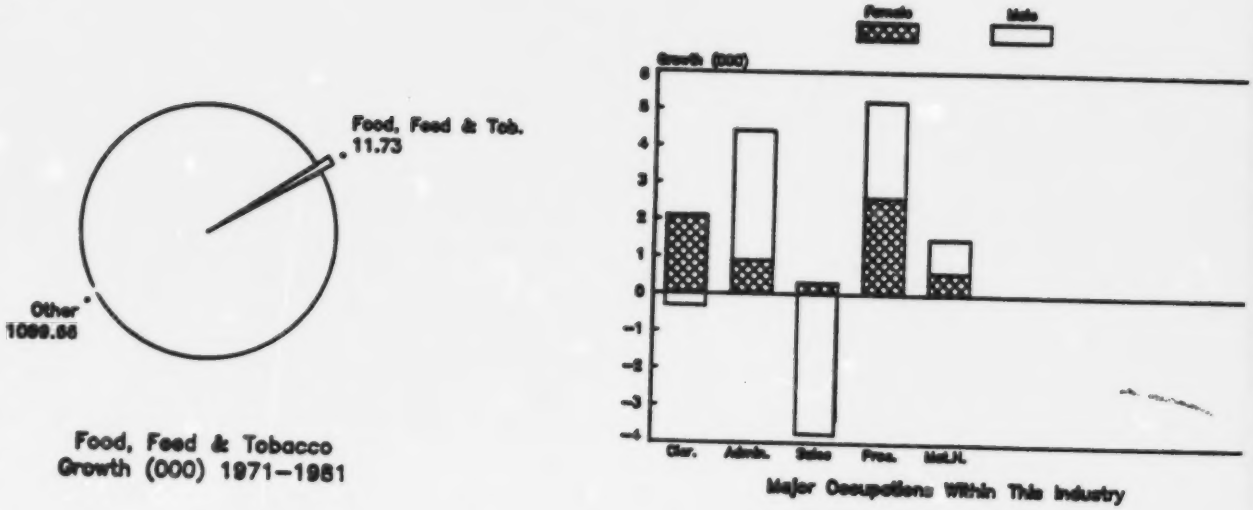


FIGURE 22
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO, 1971 - 1981



4.5.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, approximately 11,730 jobs have been created in this sector. Although female workers account for only 32.7 percent of total employment, they account for 61.4 percent of the job gains over this period.

- Processing occupations are the leading contributor to employment growth (5,160), followed by Managerial and Administrative occupations (4,430), Clerical occupations (1,770), Material Handling occupations, and Fabricating, Assembling and Repairing occupations (1,230).

- Managerial and Administrative occupations have more than doubled in size over this period.

- Sales occupations have lost 3,420 jobs over the 1971-1981 period.

4.5.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have experienced the highest annual employment growth rate (8.4 percent), followed by Fabricating, Assembling and Repairing occupations (4.2 percent).

- With the exception of Material Handling occupations, employment growth rates for females are higher than those for male workers.

- As a result of higher than average rates of growth, the following occupational groups have gained in employment share within the sector: Managerial and Administrative occupations; Processing occupations; and Fabricating, Assembling and Repairing occupations.

- Conversely, Sales occupations have lost in employment share within the sector.

- On an overall basis, this sector has lost in employment share among the 23 industry sectors.

FIGURE 23
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO, 1971 - 1981

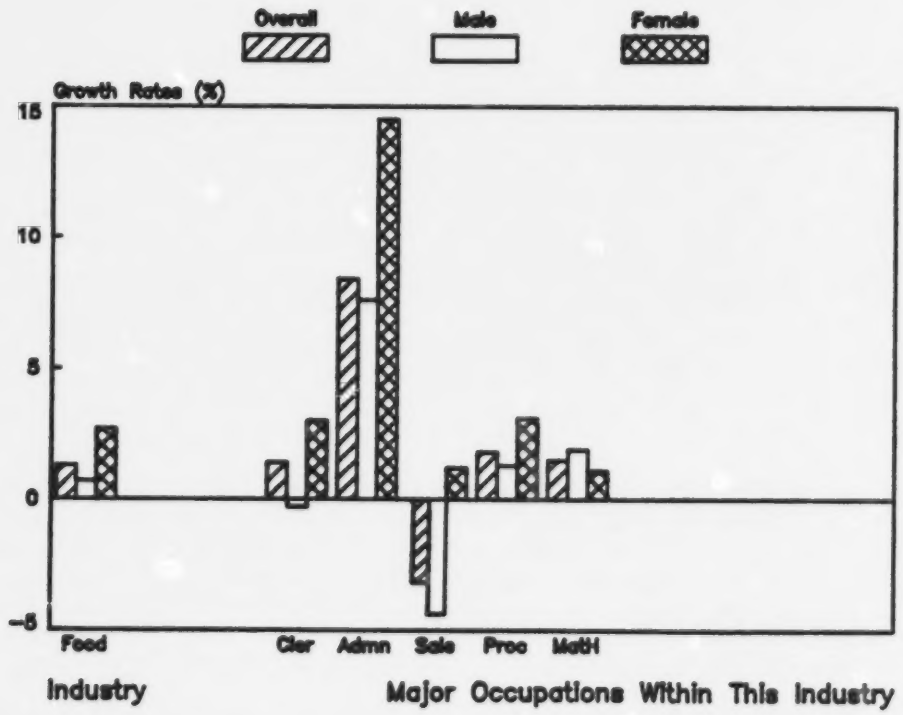


TABLE 13
SELECTED 4-DIGIT OCCUPATIONS IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	700	8.8	30	-5	25	0.4	LOSS
1135	MGRS: FINANCIAL	260	3.3	190	35	225	22.2	GAIN
1137	SALES MGMT OCCS	1660	20.8	1250	210	1460	23.6	GAIN
1143	PRODUCTION MGMT OCCS	1600	20.0	1255	85	1340	19.9	GAIN
1149	MGMT: NEC	760	9.5	440	145	585	15.8	GAIN
1171	FINANCIAL OFFICERS	1115	13.9	145	125	270	2.8	LOSS
1175	PURCHASING OFFICERS	475	5.9	40	90	130	3.2	LOSS
1179	OCCS IN MGMT:NEC	515	6.4	-230	110	-120	-2.1	LOSS
MAN. & ADMIN.	TOTAL	7995	100.0	3520	910	4430	8.4	
41	CLERICAL							
4111	SECRETARIES & STENO	1745	12.5	-5	-20	-25	-0.1	LOSS
4113	TYPISTS & CLERK-TYP	320	2.3	-5	-185	-190	-4.6	LOSS
4130	SUPERV:BOOKKEEPING	230	1.6	30	75	105	6.3	GAIN
4131	BOOKKEEPERS	3195	22.9	-75	900	825	3.0	GAIN
4133	CASHIERS & TELLERS	670	4.8	-30	425	395	9.3	GAIN
4143	EDP EQUIP OPERATORS	700	5.0	45	335	380	8.1	GAIN
4150	SUPERV:RECORD.SCHED	500	3.6	95	5	100	2.3	GAIN
4153	SHIPPING CLERKS	2855	20.4	20	110	130	0.5	LOSS
4155	STOCK CLERKS	825	5.9	100	115	215	3.1	GAIN
4190	SUPERV:CLERICAL:NEC	165	1.2	-280	15	-265	-9.1	LOSS
4197	GEN OFF CLERKS	655	4.7	-110	30	-80	-1.1	LOSS
CLERICAL	TOTAL	13965	100.0	-330	2105	1775	1.4	
51	SALES							
5130	SUPERV:SALES.COM	970	10.8	-1480	5	-1475	-8.8	LOSS
5133	COMMERCIAL TRAVELLER	3235	36.1	630	210	840	3.1	GAIN
5135	SALESPERSONS COM:NEC	2775	31.0	-435	95	-340	-1.1	GAIN
5193	ROUTE DRIVERS	1725	19.3	-2275	-45	-2320	-8.2	LOSS
SALES	TOTAL	8960	100.0	-3710	285	-3425	-3.2	
81	PROCESSING							
8210	SUPERV FOOD & BEV	3565	11.2	-165	115	-50	-0.1	LOSS
8211	FLOUR & GRAIN MILL	1260	4.0	295	60	355	3.4	GAIN
8213	BAKING	7235	22.7	525	895	1420	2.2	GAIN
8215	SLAUGHTERING	7270	22.8	1330	1025	2355	4.0	GAIN
8223	MILK PROCESSING	1565	4.9	150	70	220	1.5	LOSS
8226	INSPECTING:FOOD.BEV	1515	4.8	215	255	470	3.8	GAIN
8227	BEVERAGE PROCESSING	1345	4.2	145	120	265	2.2	GAIN
8228	LABOUR:FOOD & BEV	3380	10.6	-40	30	-10	-0.0	LOSS
8229	FOOD & BEV:NEC	2070	6.5	170	210	380	2.0	GAIN
PROCESSING	TOTAL	31870	100.0	2565	2600	5165	1.8	
85	FABRICATING							
8533	ELEC EQUIP REPAIR:NEC	435	11.8	230	5	235	8.1	GAIN
8580	SUPERV:MECHANICS	240	6.5	140	0	140	9.1	GAIN
8581	AUTO MECHANICS	340	9.2	-40	10	-30	-0.8	LOSS
8584	INDUST.FARM MECHANICS	1805	49.0	1025	15	1040	9.0	GAIN
8589	OTHER MECHANICS:NEC	400	10.9	5	0	5	0.1	LOSS
FABRICATING	TOTAL	3680	100.0	1220	15	1235	4.2	
93	MAT. HANDLING							
9313	LONGSHORE WORKERS	1160	10.1	235	40	275	2.7	GAIN
9315	MAT-HANDLING EQ OP:NEC	1480	12.9	580	40	620	5.6	GAIN
9317	PACKAGING OCCS:NEC	7845	68.4	145	505	650	0.9	LOSS
MAT. HANDLING	TOTAL	11465	100.0	950	620	1570	1.5	

4.6 Textiles and Clothing

In 1981, this sector employed 66,800 persons, accounting for approximately 1.6 percent of total employment in Ontario. This sector created some 15,580 new jobs in the last decade; approximately 4 in every 5 jobs created went to females. Since the annual employment growth rate of Textiles and Clothing (2.7 percent) is marginally lower than the overall rate of growth (2.8 percent) for all industries in Ontario, this sector's employment share has declined slightly in 1981.

The four dominant occupational groups in this sector are: Fabricating, Assembling and Repairing occupations; Clerical occupations; Managerial and Administrative occupations; and Processing occupations. Together they account for about 81.4 percent of total employment in the industry.

4.6.1 Occupational Distribution Within the Industry

- When compared with the overall occupational distribution for all industries, Fabricating, Assembling and Repairing occupations and Processing occupations have higher employment concentration in this sector, while the opposite is true for Clerical occupations and Managerial and Administrative occupations.

- In Fabricating, Assembling and Repairing occupations and Processing occupations, the employment concentration of females is also substantially higher than the overall average for all industries.

FIGURE 24
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO, 1981

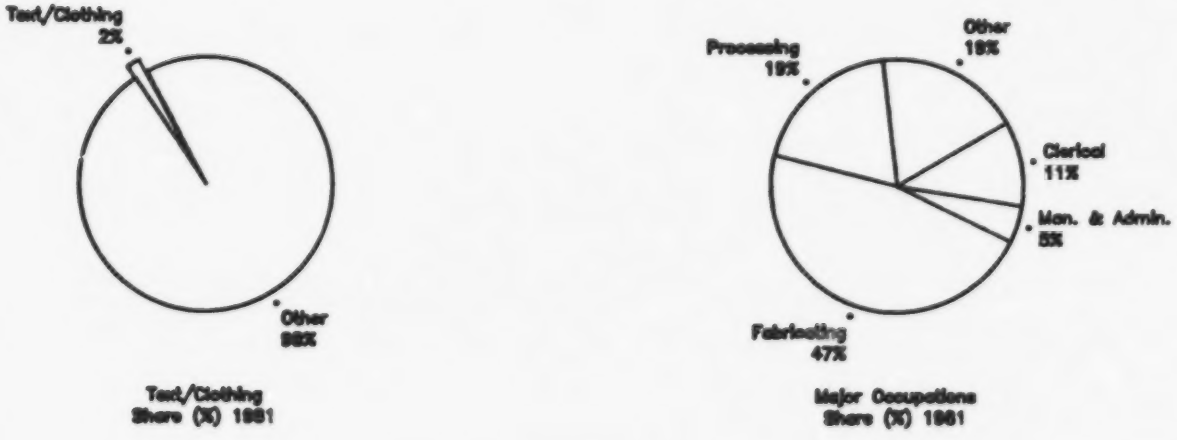
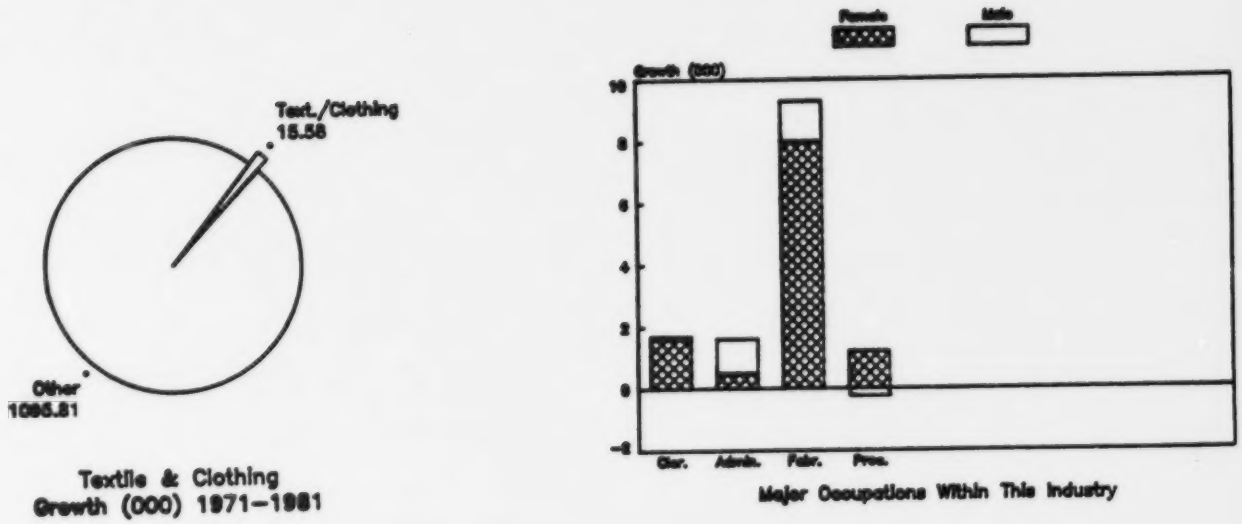


FIGURE 25
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO, 1971 - 1981



4.6.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in Textiles and Clothing rose by about 15,580 jobs, 12,900 for females and 2,700 for males. The 4 major occupational groups together account for almost 89 percent of the employment gains.

- Fabricating, Assembling and Repairing occupations are the largest contributor to employment growth (9,380), followed by Clerical occupations (1,770), Managerial and Administrative occupations (1,650), and Processing occupations (1,010).

- Females account for almost 83 percent of the job increase in this sector.

4.8.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (7.9 percent) over the 1971-1981 period.
- Among the major occupational groups in this sector, the annual employment growth rates for females are much higher than that for males.
- As a result of higher than average employment growth rates, the following occupational groups have gained employment share within the sector: Managerial and Administrative occupations; Fabricating, Assembling and Repairing occupations and Clerical occupations.
- Conversely, Processing occupations have lost in employment share from 23.2 percent in 1971 to 19.3 percent in 1981.
- In the aggregate, this sector has lost in employment share among the 23 industry sectors.

FIGURE 26
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO, 1971 - 1981

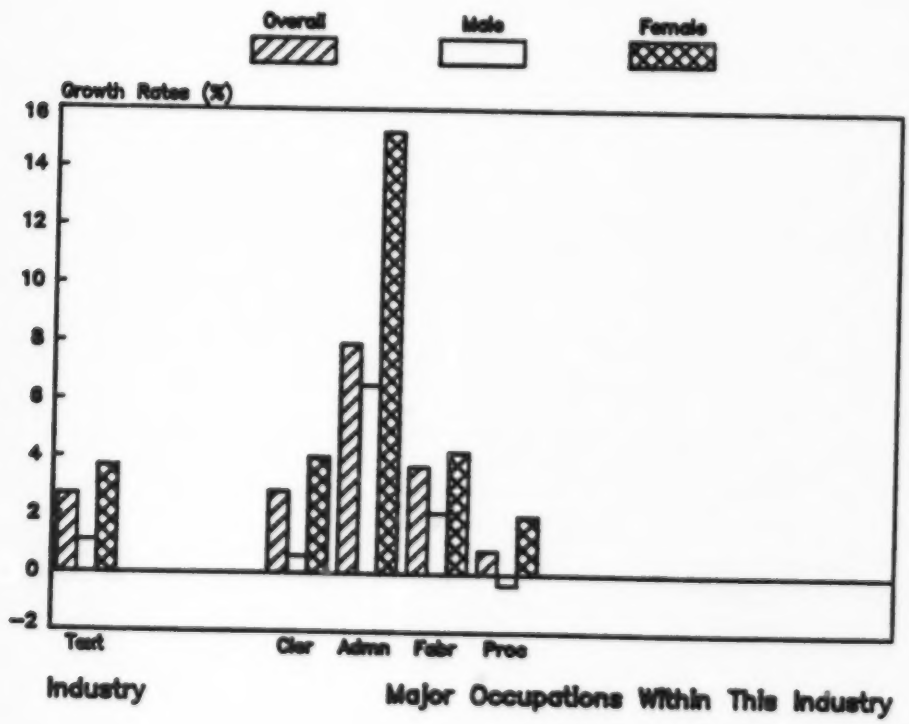


TABLE 14
SELECTED 4-DIGIT OCCUPATIONS IN THE TEXTILE & CLOTHING INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	340	11.0	-125	5	-120	-3.0	LOSS
1137	SALES MGMT OCCS	375	12.1	230	60	290	16.0	GAIN
1143	PRODUCTION MGMT OCCS	895	29.0	635	125	760	20.8	GAIN
1149	MGMT: NEC	415	13.4	230	70	300	13.7	GAIN
1171	FINANCIAL OFFICERS	350	11.3	90	30	120	4.3	LOSS
1175	PURCHASING OFFICERS	145	4.7	10	60	70	6.8	LOSS
1179	OCCS IN MGMT:NEC	170	5.5	-70	65	-5	-0.3	LOSS
MAN. & ADMIN.	TOTAL	3090	100.0	1130	515	1645	7.9	
41	CLERICAL							
4111	SECRETARIES & STENO	650	8.9	-20	135	115	2.0	LOSS
4131	BOOKKEEPERS	1570	21.6	60	255	315	2.3	LOSS
4143	EDP EQUIP OPERATORS	355	4.9	35	180	215	9.8	GAIN
4151	PRODUCTION CLERKS	405	5.6	-20	165	145	4.5	GAIN
4153	SHIPPING CLERKS	1460	20.1	225	270	495	4.2	GAIN
4155	STOCK CLERKS	625	8.6	-35	170	135	2.5	LOSS
4179	INFORMATION OCCS:NEC	210	2.9	5	100	105	7.2	GAIN
4190	SUPERV:CLERICAL:NEC	105	1.4	-120	5	-115	-7.1	LOSS
4197	GEN OFF CLERKS	445	6.1	0	80	80	2.0	LOSS
CLERICAL	TOTAL	7280	100.0	135	1640	1775	2.8	
81	PROCESSING							
8179	CHEMICALS:NEC	240	1.9	-215	-55	-270	-7.3	LOSS
8260	SUPERV TEXTILE PROC	1230	9.5	-150	145	-5	-0.0	LOSS
8261	TEXTILE PREPARING	380	2.9	-160	25	-135	-3.0	LOSS
8263	TEXTILE SPINNING	1190	9.2	-35	155	120	1.1	GAIN
8265	TEXTILE WINDING	980	7.6	70	-255	-185	-1.7	LOSS
8267	TEXTILE WEAVING	1305	10.1	-125	95	-30	-0.2	LOSS
8271	KNITTING	1380	10.7	30	275	305	2.5	GAIN
8275	TEXTILE FINISHING	685	5.3	65	85	150	2.5	GAIN
8276	INSPECTING:TEXTILE	1295	10.0	115	215	330	3.0	GAIN
8278	LABOUR:TEXTILE PROC	1620	12.5	205	260	465	3.4	GAIN
8279	TEXTILE PROC:NEC	1675	13.0	30	170	200	1.3	GAIN
PROCESSING	TOTAL	12915	100.0	-185	1195	1010	0.8	
85	FABRICATING							
8550	SUPERV TEX,LTHR,FUR	1465	4.7	125	350	475	4.0	GAIN
8551	PAT-MKING:TEX,LTH,FUR	2155	6.9	25	340	365	1.9	LOSS
8563	SEWING MACHINE OCCS	17180	55.2	-640	5040	4400	3.0	LOSS
8566	INSPECT:TEX,LTHR,FUR	765	2.5	10	420	430	8.6	GAIN
8569	FAB TEX,LTHR,FUR:NEC	3560	11.4	675	1025	1700	6.7	GAIN
8584	INDUST.FARM MECHANICS	1290	4.1	595	20	615	6.7	GAIN
FABRICATING	TOTAL	31125	100.0	1335	8050	9385	3.7	

4.7 Wood and Furniture

This sector employed approximately 56,100 persons in 1981. Between 1971 and 1981, the Wood and Furniture industry has created 21,580 new jobs, accounting for about 2.1 percent of total employment growth in Ontario. Since this sector's annual employment growth rate (5 percent) is much higher than the overall average (2.8 percent) for all industries, the employment share of this sector has increased from 1.1 percent in 1971 to 1.3 percent in 1981.

The six largest occupational groups in this sector are: Fabricating, Assembling and Repairing occupations; Processing occupations; Clerical occupations; Machining occupations; Material Handling occupations; and Managerial and Administrative occupations. These occupational groups together account for about 81 percent of total employment.

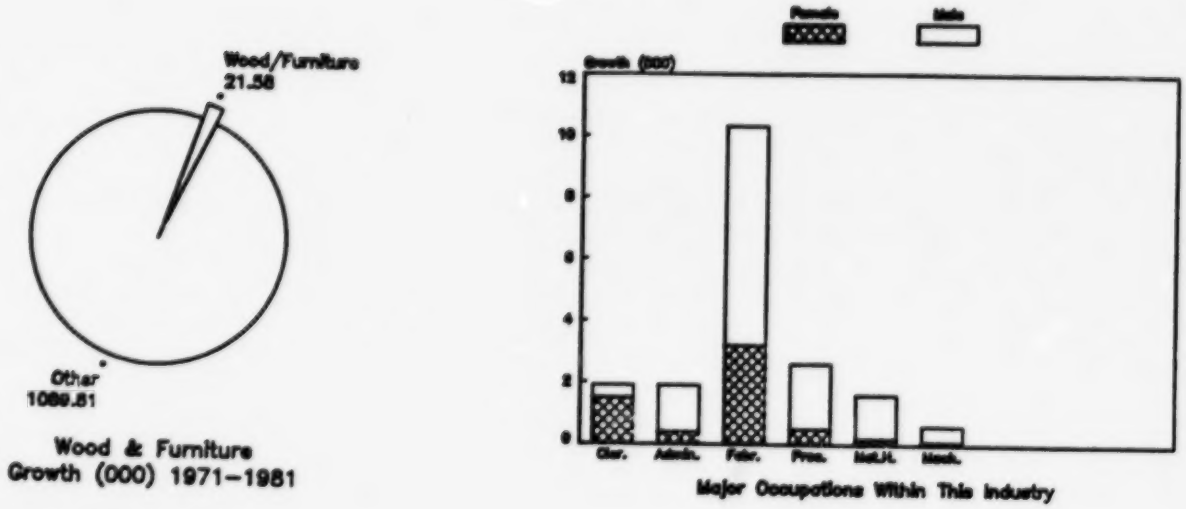
4.7.1 Occupational Distribution Within the Industry

- When compared with the overall occupational distribution for all industries, the following 4 occupational groups are highly concentrated in this sector: Fabricating, Assembling and Repairing occupations; Processing occupations; Machining occupations; and Material Handling occupations.

- Males are also highly represented in these 4 occupational groups, accounting for at least 75 percent of employment in each group.

FIGURE 27
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE WOOD & FURNITURE INDUSTRY, ONTARIO, 1981

FIGURE 28
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE WOOD & FURNITURE INDUSTRY, ONTARIO, 1971 - 1981



4.7.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment rose by 21,580 in this sector, about 15,000 for males and 6,500 for females.
- Fabricating, Assembling and Repairing occupations have made the most significant contribution to employment growth (10,250), followed by Processing occupations (2,540).
- With the exception of Clerical occupations, males account for most of the new jobs in the major occupational groups.
- Managerial and Administrative occupations have doubled in size, while Fabricating, Assembling and Repairing occupations and Material Handling occupations have almost doubled in size over the 1971 - 1981 period.

4.7.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (9.6 percent), followed by Material Handling occupations (6.9 percent), Fabricating, Assembling and Repairing occupations (6.6 percent), and Processing occupations (5.4 percent).

- As a result of higher than average growth rates, the above 4 occupational groups have all gained in employment share within the industry.

- Conversely, Clerical occupations and Machining occupations have lost in employment share within the sector.

- On an overall basis, the Wood and Furniture sector has gained in employment share among the 23 industry sectors.

FIGURE 29
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE WOOD & FURNITURE INDUSTRY, ONTARIO, 1971 - 1981

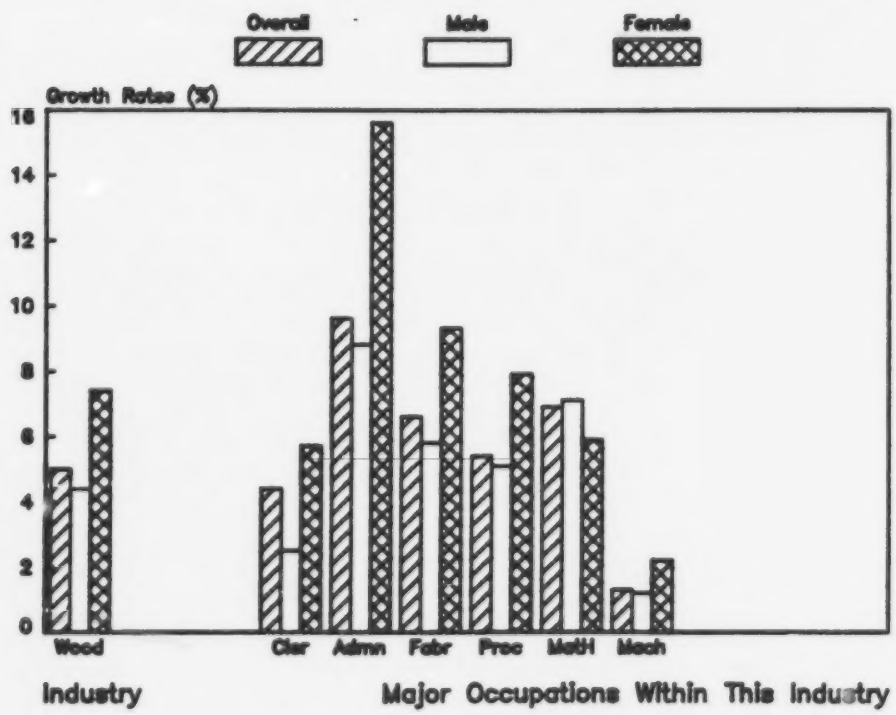


TABLE 15
SELECTED 4-DIGIT OCCUPATIONS IN THE WOOD & FURNITURE INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	440	13.8	80	0	80	2.0	LOSS
1137	SALES MGMT OCCS	380	11.9	275	50	325	21.3	GAIN
1143	PRODUCTION MGMT OCCS	945	29.7	815	20	835	24.0	GAIN
1149	MGMT: NEC	465	14.6	205	165	370	17.2	GAIN
1171	FINANCIAL OFFICERS	320	10.1	85	55	140	5.9	LOSS
1175	PURCHASING OFFICERS	170	5.3	50	5	55	4.0	LOSS
1179	OCCS IN MGMT:NEC	115	3.6	-110	5	-105	-6.3	LOSS
MAN. & ADMIN.	TOTAL	3180	100.0	1545	360	1905	9.6	
41	CLERICAL							
4111	SECRETARIES & STENO	565	10.2	10	95	105	2.1	LOSS
4113	TYPISTS & CLERK-TYP	265	4.8	0	90	90	4.2	LOSS
4131	BOOKKEEPERS	1585	28.5	-25	560	535	4.2	LOSS
4143	EDP EQUIP OPERATORS	180	3.2	20	125	145	17.8	GAIN
4151	PRODUCTION CLERKS	240	4.3	85	50	135	8.6	GAIN
4153	SHIPPING CLERKS	1065	19.2	400	45	445	5.6	GAIN
4155	STOCK CLERKS	280	5.0	-5	20	15	0.6	LOSS
4197	GEN OFF CLERKS	475	8.5	-10	280	270	8.8	GAIN
CLERICAL	TOTAL	5560	100.0	450	1490	1940	4.4	
81	PROCESSING							
8149	METAL PROCESSING:NEC	230	3.7	200	10	210	27.7	GAIN
8230	SUPERV WOOD PROCESS	725	11.7	325	5	330	6.3	GAIN
8231	SAWMILL SAWYERS	935	15.1	140	15	155	1.8	LOSS
8233	PLYWOOD MAKING	680	11.0	120	165	285	5.6	GAIN
8235	WOOD TREATING	255	4.1	110	50	160	10.4	GAIN
8236	INSPECTING:WOOD	455	7.4	20	100	120	3.1	LOSS
8238	LABOUR:WOOD	1520	24.6	385	80	465	3.7	LOSS
8239	WOOD PROCESSING:NEC	650	10.5	440	30	470	13.7	GAIN
PROCESSING	TOTAL	6190	100.0	2070	475	2545	5.4	
83	MACHINING							
8313	MACHINIST	305	5.9	55	0	55	2.0	GAIN
8334	MET-WORK-MACH OP:NEC	300	5.8	25	10	35	1.2	LOSS
8335	WELDING	825	15.9	390	35	425	7.5	GAIN
8350	SUPERV WOOD MACH	240	4.6	-80	25	-55	-2.0	LOSS
8353	WOOD SAWING	1065	20.5	260	55	315	3.6	GAIN
8355	WOOD MACHINING	920	17.7	-320	-140	-460	-4.8	LOSS
8357	WOOD SANDING	550	10.6	10	90	100	2.0	GAIN
MACHINING	TOTAL	5195	100.0	485	145	630	1.3	
85	FABRICATING							
8540	SUPERV WOOD PRODUCT	1695	7.8	770	125	895	7.8	GAIN
8541	CABINET MAKERS	6315	29.0	2450	775	3225	7.4	GAIN
8549	FAB WOOD PRODUCT:NEC	1835	8.4	935	150	1085	9.4	GAIN
8562	UPHOLSTERERS	4110	18.8	1170	625	1795	5.9	LOSS
8563	SEWING MACHINE OCCS	1445	6.6	0	630	630	5.9	LOSS
8584	INDUST.FARM MECHANICS	920	4.2	640	0	640	12.6	GAIN
8595	PAINTING. DECORATING	2140	9.8	785	380	1165	8.2	GAIN
FABRICATING	TOTAL	21805	100.0	7060	3195	10255	6.6	
93	MAT. HANDLING							
9313	LONGSHORE WORKERS	305	9.2	160	0	160	7.7	GAIN
9315	MAT-HANDLING EQ OP:NEC	835	25.1	490	5	495	9.4	GAIN
9317	PACKAGING OCCS:NEC	945	28.4	325	110	435	6.4	LOSS
9318	LABOUR:MAT-HANDLING:NEC	960	28.8	305	70	375	5.1	LOSS
MAT. HANDLING	TOTAL	3330	100.0	1420	200	1620	6.9	

4.8 Paper, Printing and Allied Industries

In 1981, this sector employed approximately 110,000 persons in Ontario. The industry has created 18,810 new jobs between 1971 and 1981, accounting for about 1.9 percent of total employment growth in the province. Since the annual employment growth of this sector (1.9 percent) is lower than the overall average (2.8 percent) for all industries, this sector's employment share has dropped from 2.9 percent in 1971 to 2.6 percent in 1981.

Seven occupational groups are dominant in this sector; they together account for about 83 percent of total employment. They are: Other Crafts and Equipment Operating occupations; Clerical occupations; Processing occupations; Fabricating, Assembling and Repairing occupations; Managerial and Administrative occupations; Artistic, Literary and Performing Arts occupations; and Sales occupations.

4.8.1 Occupational Distribution Within the Industry

- Employment concentration is particularly prevalent in this sector for the following occupational groups: Other Crafts and Equipment Operating occupations; Processing occupations; and Artistic, Literary and Performing Arts occupations.

- In this sector, the employment proportion of males (68.5 percent) is also higher than the overall average (58.5 percent) for all industries.

FIGURE 30
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE PAPER & ALLIED PRODUCTS INDUSTRY, ONTARIO, 1981

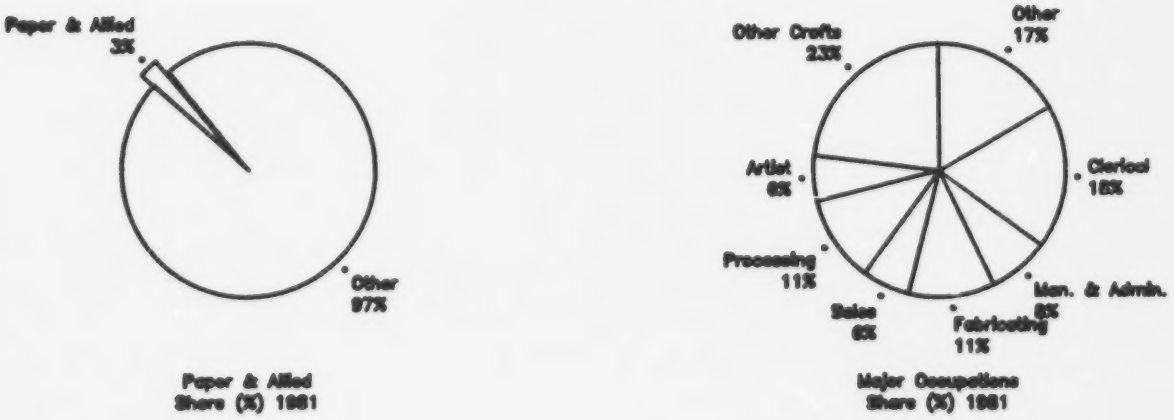
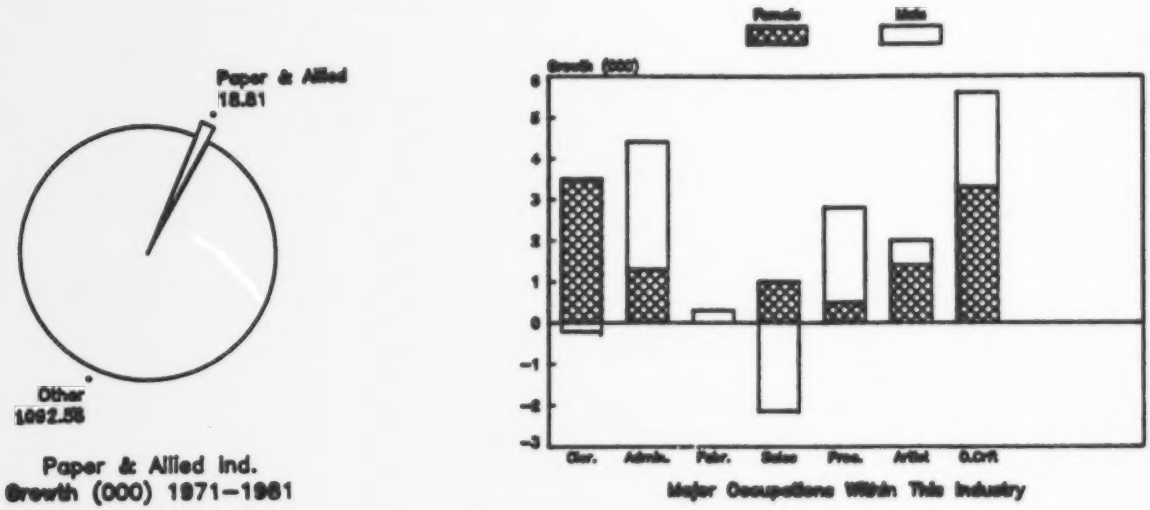


FIGURE 31
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE PAPER & ALLIED PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981



4.8.2 Occupational Employment Growth Within the Industry

- Total employment in this sector grew by 18,810 between 1971 and 1981. Females account for almost 65 percent of the employment growth, which is substantially higher than their employment share of 31.5 percent in 1981.

- Other Crafts and Equipment Operating occupations are the major contributor to employment growth (5,610), followed by Managerial and Administrative occupations (4,390), Clerical occupations (3,340); and Processing occupations (2,770).

- Sales occupations and Clerical occupations both have negative employment growth over this period.

- Managerial and Administrative occupations have doubled in size in the last decade.

4.8.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate in this sector (7.4 percent), followed by Artistic, Literary and Performing Arts occupations (3.8 percent).

- With the exception of Fabricating, Assembling and Repairing occupations, employment growth rates for females are higher than those for males in all the major occupational groups.

- As a result of higher than average employment rates, the following major occupational groups have gained in employment share within the sector: Other Crafts and Equipment Operating occupations; Managerial and Administrative occupations; Processing occupations; and Artistic, Literary and Performing Arts occupations.

- Conversely, Clerical occupations, Sales occupations, and Fabricating, Assembling and Repairing occupations have lost in employment share within the industry.

- On balance, this sector has lost in employment share among the 23 industry sectors.

FIGURE 32
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE PAPER & ALLIED PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981

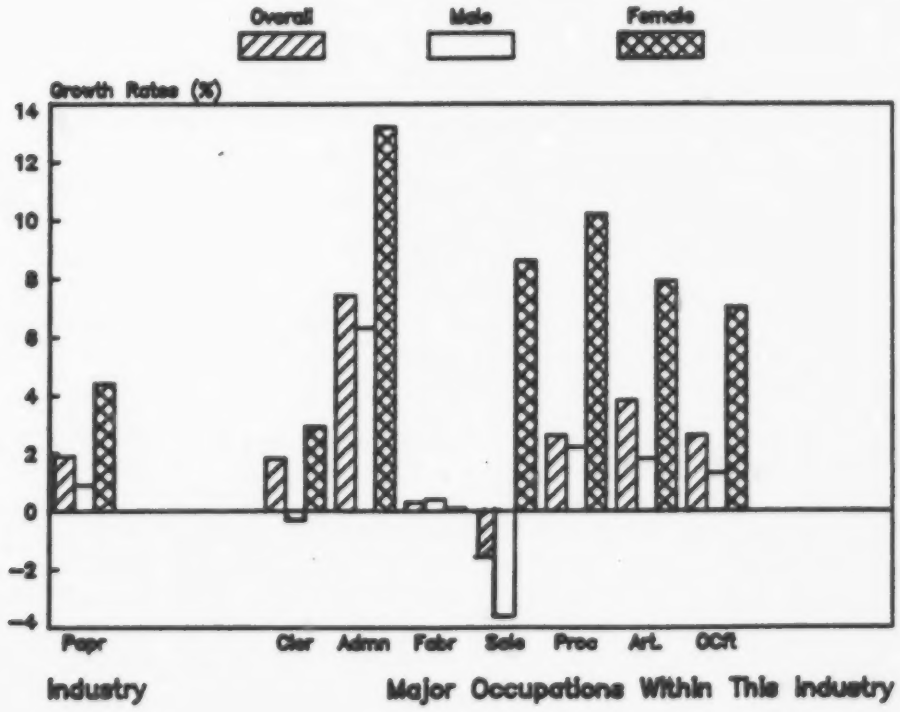


TABLE 16
SELECTED 4-DIGIT OCCUPATIONS IN THE PAPER & ALLIED INDUSTRIES INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	850	9.8	-40	0	-40	-0.5	LOSS
1136	PERSONNEL MGMT OCCS	225	2.6	160	55	215	36.5	GAIN
1137	SALES MGMT OCCS	1780	20.6	1080	275	1355	15.4	GAIN
1143	PRODUCTION MGMT OCCS	1355	15.7	990	90	1080	17.3	GAIN
1149	MGMT: NEC	1580	18.3	840	385	1225	16.1	GAIN
1171	FINANCIAL OFFICERS	1390	16.1	385	195	580	5.5	LOSS
1179	OCCS IN MGMT:NEC	555	6.4	-445	115	-330	-4.6	LOSS
MAN. & ADMIN.	TOTAL	8640	100.0	3130	1265	4395	7.4	
33	ARTIST							
3314	ADVERT.ILLUSTR ART	1620	24.8	315	490	805	7.1	GAIN
3315	PHOTO & CAMERA OPERATORS	420	6.4	50	55	105	2.9	LOSS
3352	WRITERS & ED:PUB	4185	64.0	260	795	1055	2.9	LOSS
ARTIST	TOTAL	6535	100.0	625	1395	2020	3.8	
41	CLERICAL							
4111	SECRETARIES & STENO	2365	11.8	-50	280	230	1.0	LOSS
4113	TYPISTS & CLERK-TYP	1075	5.4	-15	-355	-370	-2.9	LOSS
4131	BOOKKEEPERS	4115	20.5	-225	1275	1050	3.0	GAIN
4143	EDP EQUIP OPERATORS	1115	5.6	80	550	630	8.7	GAIN
4150	SUPERV:RECORD.SCHED	495	2.5	175	40	215	5.9	GAIN
4151	PRODUCTION CLERKS	660	3.3	40	150	190	3.5	GAIN
4153	SHIPPING CLERKS	1865	9.3	245	205	450	2.8	GAIN
4155	STOCK CLERKS	985	4.9	160	145	305	3.8	GAIN
4171	RECEPTIONISTS	840	4.2	-25	440	415	7.1	GAIN
4190	SUPERV:CLERICAL:NEC	290	1.4	-305	-145	-450	-8.9	LOSS
4197	GEN OFF CLERKS	1395	6.9	-80	175	95	0.7	LOSS
4199	OTHER CLERICAL:NEC	1230	6.1	-185	195	10	0.1	LOSS
CLERICAL	TOTAL	20080	100.0	-175	3510	3335	1.8	
51	SALES							
5130	SUPERV:SALES.COM	720	10.7	-845	35	-810	-7.3	LOSS
5133	COMMERCIAL TRAVELLER	2890	43.1	1140	340	1480	7.4	GAIN
5135	SALESPERSONS COM:NEC	815	12.2	-105	210	105	1.4	GAIN
5149	SALES OCCS.COM:NEC	220	3.3	40	85	125	8.8	GAIN
5174	ADVERTISING SALES	1475	22.0	-265	520	255	1.9	GAIN
5177	BUSINESS SERV SALES	225	3.4	170	30	200	24.6	GAIN
SALES	TOTAL	6700	100.0	-2135	1010	-1125	-1.5	
81	PROCESSING							
8250	SUPERV PULP & PAPER	1365	11.1	275	5	280	2.3	LOSS
8251	CELLULOSE PULP PREP	985	8.0	-290	10	-280	-2.5	LOSS
8253	PAPERMAKING	2985	24.2	830	115	945	3.9	GAIN
8256	INSPECT:PULP & PAPER	840	6.8	125	60	185	2.5	LOSS
8258	LABOUR:PULP & PAPER	2620	21.2	570	95	665	3.0	GAIN
8259	PULP & PAPER:NEC	2340	19.0	660	185	845	4.6	GAIN
PROCESSING	TOTAL	12335	100.0	2265	510	2775	2.6	
85	FABRICATING							
8533	ELEC EQUIP REPAIR:NEC	320	2.6	180	5	185	9.0	GAIN
8579	FAB RUBBER.PLAST:NEC	150	1.2	55	45	100	11.6	GAIN
8580	SUPERV:MECHANICS	280	2.3	190	0	190	12.0	GAIN
8584	INDUST.FARM MECHANICS	2160	17.7	735	5	740	4.3	GAIN
8590	SUPERV:PROD FAB	670	5.5	-175	10	-165	-2.2	LOSS
8593	PAPER PROD FAB	6005	49.3	-140	25	-115	-0.2	LOSS
8598	LABOUR:PROD FAB	545	4.5	-365	-110	-475	-6.1	LOSS
FABRICATING	TOTAL	12175	100.0	330	20	350	0.3	
95	OTHER CRAFTS							
9510	SUPERV:PRINTING	2815	11.3	-60	190	130	0.5	LOSS
9511	TYPESETTING	4200	16.8	-1095	820	-275	-0.6	LOSS
9512	PRINTING PRESS OCCS	6430	25.7	1720	400	2120	4.1	GAIN
9514	PRINTING ENGRAVING	1375	5.5	60	40	100	0.8	LOSS
9515	PHOTOENGRAVING	995	4.0	340	85	425	5.7	GAIN
9517	BOOKBINDING	3360	13.5	325	735	1060	3.9	GAIN
9518	LABOUR:PRINTING	1220	4.9	315	260	575	6.6	GAIN
9519	PRINTING:NEC	3140	12.6	750	710	1460	6.5	GAIN
9591	PHOTOGRAPHIC PROCESS	500	2.0	185	80	265	7.8	GAIN
OTHER CRAFTS	TOTAL	24975	100.0	2275	3330	5605	2.6	

4.9 Primary Metal and Metal Fabricating

There were 178,400 persons employed in this industry in 1981. Since this sector's annual employment growth rate (2.4 percent) is lower than the overall growth rate (2.8 percent) for all industries, the employment share of this sector has shrunk from 4.5 percent in 1971 to 4.3 percent in 1983. This sector has created approximately 37,230 new jobs over this period and remains as the sixth largest employer in the province.

The seven major occupations in this sector are: Machining occupations; Processing occupations; Fabricating, Assembling and Repairing occupations; Material Handling occupations; Managerial and Administrative occupations; Natural Sciences; Engineering and Mathematics occupations; and Clerical occupations. Together, these occupational groups account for about 85 percent of total employment in the industry.

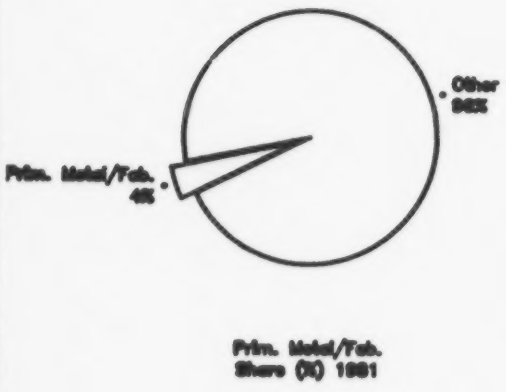
4.9.1 Occupational Distribution Within the Industry

- Machining occupations and Processing occupations are highly concentrated in this sector; they together account for close to half of the total employment (46 percent).

- Males account for approximately 85.9 percent of total employment in this sector, which is considerably higher than the overall average of 58.5 percent for all industries.

- Employment concentration of males is particularly prevalent in the following occupational groups: Processing occupations; Machining occupations; and Fabricating, Assembling and Repairing occupations.

FIGURE 33
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO, 1981



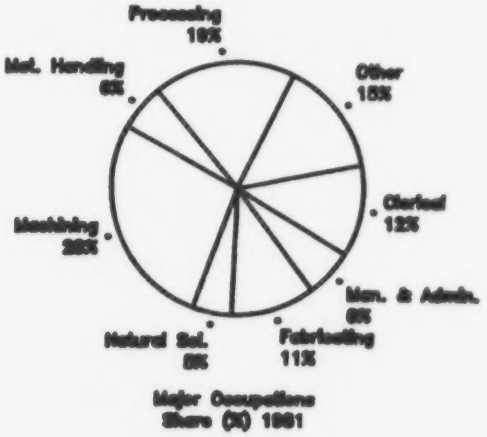
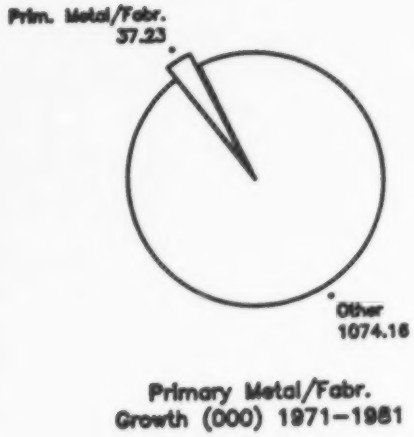
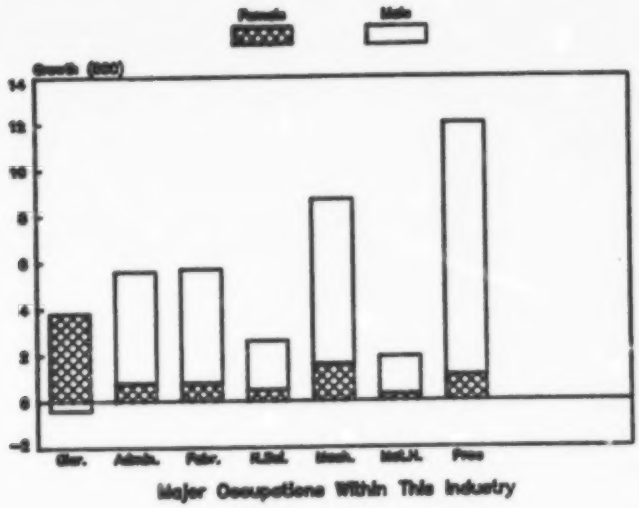


FIGURE 34
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO, 1971 - 1981



Primary Metal/Fabr.
Growth (000) 1971–1981



Major Occupations Within This Industry

4.9.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in this sector rose by 37,230, about 28,000 for males and 9,300 for females.
- The largest contributor to employment growth is Processing occupations (12,000), followed by Machining occupations (8,690), Fabricating, Assembling and Repairing occupations (5,690), and Managerial and Administrative occupations (5,610).
- With the exception of Clerical occupations, males account most of the employment growth among the major occupational groups.
- Managerial and Administrative occupations have doubled in size over this period.

4.9.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (7.3 percent) in this sector, followed by Processing occupations (4.6 percent), Fabricating, Assembling and Repairing occupations (3.6 percent), and Natural Sciences, Engineering and Mathematics occupations (3.4 percent).

- As a result of higher than average employment growth rates, the above occupational groups have all gained in employment share within the sector.

- Conversely, Machining occupations, Clerical occupations, and Material Handling occupations have all lost in employment share because of below industry average employment growth rates.

- On an overall basis, this sector has also lost in employment share among the 23 industry sectors.

FIGURE 35
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO, 1971 - 1981

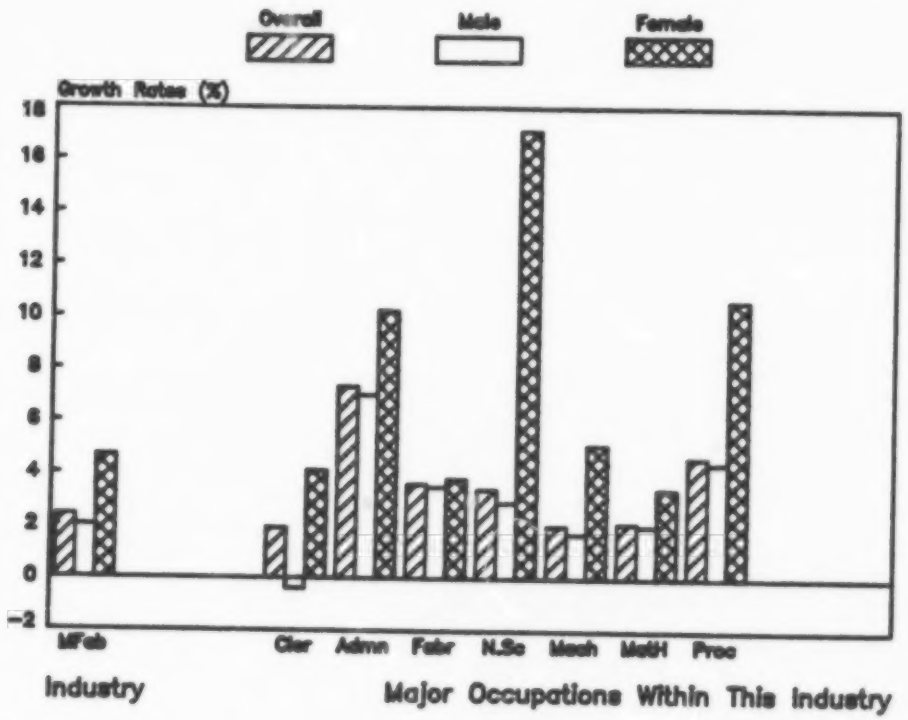


TABLE 17
SELECTED 4-DIGIT OCCUPATIONS IN THE PRIMARY METAL & METAL INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	1235	11.2	80	-5	75	0.6	LOSS
1131	MANAGERS:NATURAL SCI	360	3.3	310	0	310	21.8	GAIN
1135	MGRS: FINANCIAL	330	3.0	195	85	280	20.8	GAIN
1137	SALES MGMT OCCS	1165	10.5	850	40	890	15.5	GAIN
1141	PURCHASING MGMT OCCS	415	3.8	215	55	270	11.1	GAIN
1143	PRODUCTION MGMT OCCS	2490	22.5	1995	15	2010	17.9	GAIN
1149	MGMT: NEC	1360	12.3	745	260	1005	14.4	GAIN
1171	FINANCIAL OFFICERS	1780	16.1	420	90	510	3.4	LOSS
1175	PURCHASING OFFICERS	620	5.6	60	100	160	3.0	LOSS
MAN. & ADMIN.	TOTAL	11055	100.0	4845	765	5610	7.3	
21	NATURAL SCI.							
2117	PHYSICAL SCI TECHN	735	8.2	-70	15	-55	-0.7	LOSS
2145	INDUSTRIAL ENGINEERS	1030	11.5	20	30	50	0.5	LOSS
2147	MECHANICAL ENGINEERS	1140	12.7	380	0	380	4.1	GAIN
2151	METALLURGICAL ENG	470	5.2	200	10	210	6.1	GAIN
2163	DRAUGHTING OCCUPATIONS	1465	16.3	235	120	355	2.8	LOSS
2165	ENGINEERING TECHN	1680	18.7	815	95	910	8.1	GAIN
2183	SYSTEMS ANALYSTS	745	8.3	315	135	450	9.7	GAIN
NATURAL SCI.	TOTAL	8965	100.0	2050	480	2530	3.4	
41	CLERICAL							
4111	SECRETARIES & STENO	2710	13.1	-25	565	540	2.2	GAIN
4131	BOOKKEEPERS	4600	22.2	-505	1380	875	2.1	GAIN
4141	OFF MACH OPERATORS	110	0.5	-70	-100	-170	-8.9	LOSS
4143	EDP EQUIP OPERATORS	860	4.1	85	320	405	6.6	GAIN
4151	PRODUCTION CLERKS	1475	7.1	255	265	520	4.4	GAIN
4153	SHIPPING CLERKS	3170	15.3	495	255	750	2.7	GAIN
4155	STOCK CLERKS	1840	8.9	365	245	610	4.1	GAIN
4171	RECEPTIONISTS	475	2.3	5	195	200	5.6	GAIN
4190	SUPERV:CLERICAL:NEC	265	1.3	-365	-90	-455	-9.5	LOSS
4197	GEN OFF CLERKS	1270	6.1	-120	350	230	2.0	GAIN
4199	OTHER CLERICAL:NEC	430	2.1	-325	55	-270	-4.8	LOSS
CLERICAL	TOTAL	20735	100.0	-290	3820	3530	1.9	
81	PROCESSING							
8130	SUPERV METAL PROCES	4140	12.6	1195	30	1225	3.6	LOSS
8131	METAL SMELTING	2410	7.3	-250	60	-190	-0.8	LOSS
8135	METAL ROLLING	1565	4.8	-85	25	-60	-0.4	LOSS
8137	METAL MOULDING	3350	10.2	125	150	275	0.9	LOSS
8146	INSPECTING:METAL PRO	1825	5.5	940	170	1110	9.8	GAIN
8148	LABOUR:METAL PROCESS	4095	12.4	1815	160	1975	6.8	GAIN
8149	METAL PROCESSING:NEC	9400	28.5	5655	210	5865	10.3	GAIN
PROCESSING	TOTAL	32925	100.0	10885	1115	12000	4.6	
83	MACHINING							
8310	SUPERV METAL MACH	2345	4.8	-145	-5	-150	-0.6	LOSS
8311	TOOL & DIE MAKING	4685	9.6	1295	65	1360	3.5	GAIN
8313	MACHINIST	7190	14.7	1520	-10	1510	2.4	GAIN
8315	MACHINE TOOL OP	4765	9.7	-1215	-50	-1265	-2.3	LOSS
8330	SUPERV METAL SHAPE	2715	5.5	625	65	690	3.0	GAIN
8333	SHEETMETAL WORKERS	4925	10.1	1890	585	2475	7.2	GAIN
8334	MET-WORK-MACH OP:NEC	6100	12.5	430	490	920	1.6	LOSS
8335	WELDING	8770	17.9	1680	120	1800	2.3	GAIN
MACHINING	TOTAL	48990	100.0	7070	1620	8690	2.0	
85	FABRICATING							
8529	OTHER MET PROD:NEC	3325	17.2	780	535	1315	5.2	GAIN
8533	ELEC EQUIP REPAIR:NEC	1605	8.3	910	0	910	8.7	GAIN
8584	INDUST.FARM MECHANICS	5740	29.7	2250	25	2275	5.2	GAIN
8599	OTHER PROD FAB:NEC	910	4.7	285	75	360	5.2	GAIN
FABRICATING	TOTAL	19310	100.0	4915	775	5690	3.4	
93	MAT. HANDLING							
9311	HOISTING OCCS:NEC	4785	46.1	855	85	940	2.2	GAIN
9313	LONGSHORE WORKERS	665	6.4	170	35	205	3.8	GAIN
9315	MAT-HANDLING EQ OP:NEC	2065	19.9	765	0	765	4.7	GAIN
9317	PACKAGING OCCS:NEC	1680	16.2	-10	180	170	1.1	LOSS
9318	LABOUR:MAT-HANDLING:NEC	440	4.2	-275	-5	-280	-4.8	LOSS
9319	OTHER MAT-HAND:NEC	485	4.7	120	10	130	3.2	GAIN
MAT. HANDLING	TOTAL	10380	100.0	1640	325	1965	2.1	

4.10 Motor Vehicles and Parts

In 1981, this sector employed 94,300 persons, approximately 2.3 percent of total employment in Ontario. This sector created about 13,390 new jobs over the 1971-1981 period, accounting for 1.3 percent of the employment growth. Since the annual employment growth rate of this industry (1.5 percent) is lower than the overall rate of growth (2.8 percent) for all industries in Ontario, this sector's employment share has declined slightly from 2.6 percent in 1971 to 2.3 percent in 1981.

The four largest occupational groups in this sector are: Fabricating, Assembling and Repairing occupations; Machining occupations; Clerical occupations; and Managerial and Administrative occupations. In addition, Material Handling occupations and Natural Sciences, Engineering and Mathematics occupations also have substantial employment growth over this period. These 6 occupational groups together account for approximately 87 percent of total employment in the sector.

4.10.1 Occupational Distribution Within the Industry

- When compared with the occupational distribution of all industries, Fabricating, Assembling and Repairing occupations and Machining occupations show higher employment concentration in this sector.
- The opposite is true for Clerical occupations and Managerial and Administrative occupations.
- Males account for 83.6 percent of total employment in this sector, compared with the overall average of 58.5 percent for all industries.

FIGURE 36
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO, 1981

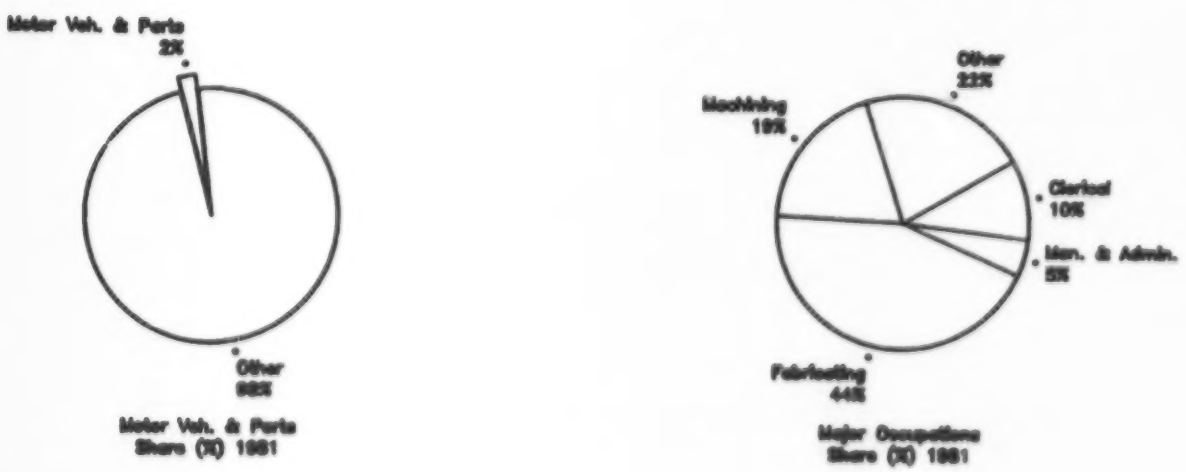
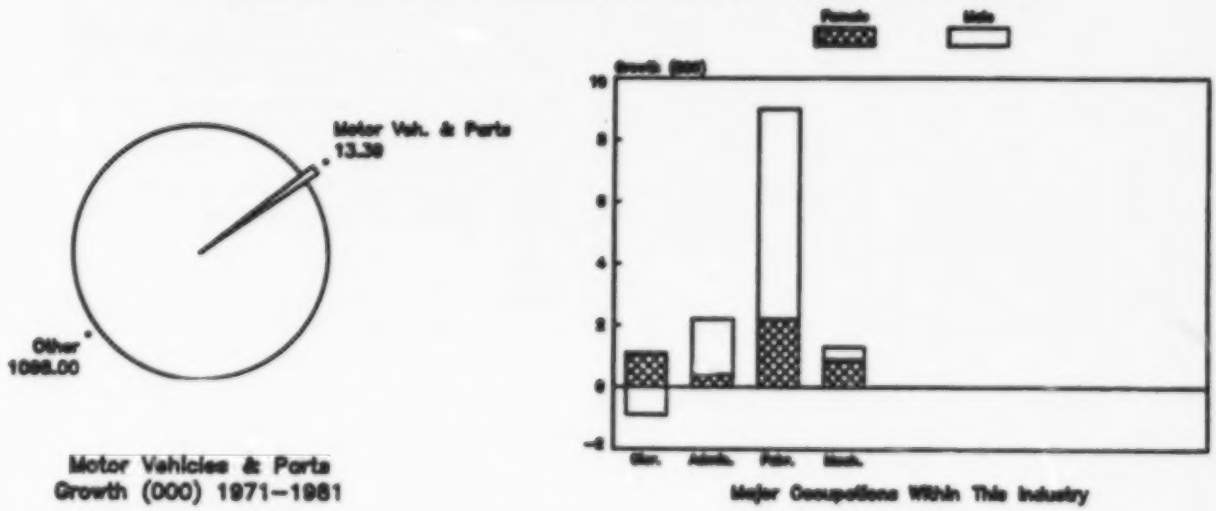


FIGURE 37
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO, 1971 - 1981



4.10.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in this sector rose by about 13,390 jobs, 5,400 for females and 8,000 for males.
- Fabricating, Assembling and Repairing occupations are the leading contributor to employment growth (8,970), followed by Managerial and Administrative occupations (2,240), Machining occupations (1,360), and Natural Sciences, Engineering and Mathematics occupations (1,280).
- The remaining occupational groups in this sector have either little or negative employment growth over this period.

4.10.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual rate of employment growth (7.3 percent) in this sector, followed by Natural Sciences, Engineering and Mathematics occupations (3.8 percent), and Fabricating, Assembling and Repairing occupations (2.5 percent).

- Among the major occupational groups, the employment growth rates for females are higher than those for males.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within the sector: Fabricating, Assembling and Repairing occupations; Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations.

- Conversely, Machining occupations and Clerical occupations have lost in employment share in this sector because of lower employment growth rates.

- Motor Vehicles and Parts, however, has lost in employment share among the 23 industry sectors over the 1971-1981 period.

FIGURE 38
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO, 1971 - 1981

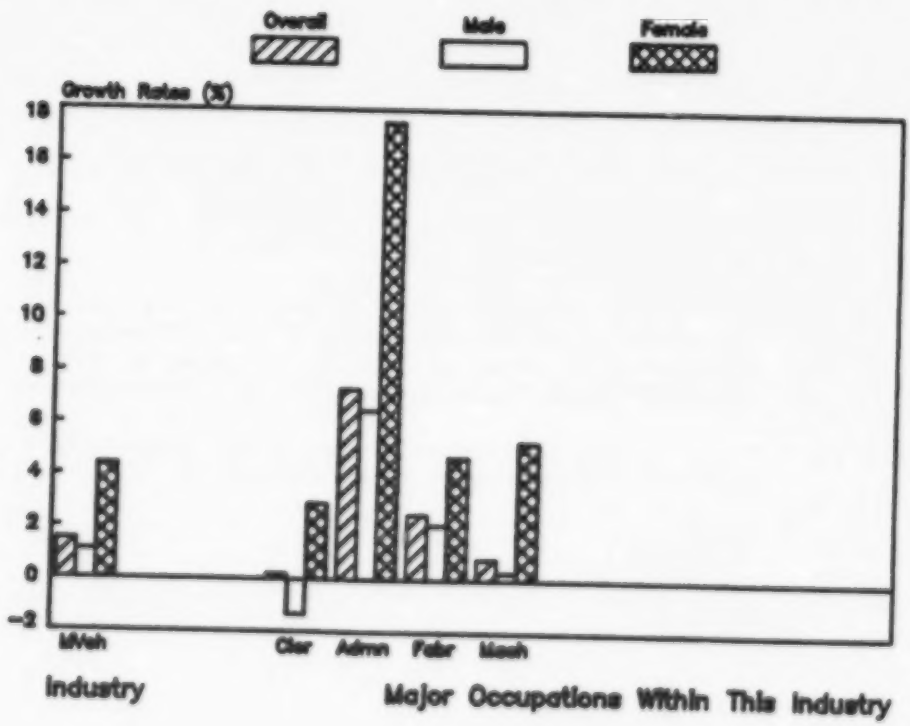


TABLE 18
SELECTED 4-DIGIT OCCUPATIONS IN THE MOTOR VEHICLES & PARTS INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	295	6.6	40	30	70	2.7	LOSS
1136	PERSONNEL MGMT OCCS	165	3.7	110	20	130	16.8	GAIN
1137	SALES MGMT OCCS	360	8.1	260	15	275	15.5	GAIN
1141	PURCHASING MGMT OCCS	165	3.7	105	20	125	15.2	GAIN
1142	SERVICES MGMT OCCS	160	3.6	115	10	125	16.4	GAIN
1143	PRODUCTION MGMT OCCS	1030	23.2	790	30	820	17.2	GAIN
1149	MGMT: NEC	420	9.5	295	35	330	16.7	GAIN
1171	FINANCIAL OFFICERS	855	19.3	65	130	195	2.6	LOSS
1174	PERSONNEL & REL OFF.	255	5.7	-25	60	35	1.5	LOSS
1175	PURCHASING OFFICERS	315	7.1	25	65	90	3.4	LOSS
1179	OCCS IN MGMT:NEC	170	3.8	-140	10	-130	-5.5	LOSS
MAN. & ADMIN.	TOTAL	4440	100.0	1820	420	2240	7.3	
21	NATURAL SCI.							
2145	INDUSTRIAL ENGINEERS	955	23.3	-10	25	15	0.2	LOSS
2147	MECHANICAL ENGINEERS	1040	25.4	370	10	380	4.7	GAIN
2163	DRAUGHTING OCCUPATIONS	265	6.5	35	-5	30	1.2	LOSS
2165	ENGINEERING TECHN	775	18.9	450	50	500	10.9	GAIN
2183	SYSTEMS ANALYSTS	510	12.4	90	80	170	4.1	GAIN
NATURAL SCI.	TOTAL	4100	100.0	1095	180	1275	3.8	
41	CLERICAL							
4111	SECRETARIES & STENO	970	9.9	-10	115	105	1.2	GAIN
4113	TYPISTS & CLERK-TYP	280	2.8	-15	-220	-235	-5.9	LOSS
4131	BOOKKEEPERS	1555	15.8	-220	320	100	0.7	GAIN
4143	EDP EQUIP OPERATORS	700	7.1	25	210	235	4.2	GAIN
4150	SUPERV:RECORD.SCHED	460	4.7	60	5	65	1.5	GAIN
4151	PRODUCTION CLERKS	810	8.2	-95	125	30	0.4	GAIN
4153	SHIPPING CLERKS	1550	15.8	80	115	195	1.4	GAIN
4155	STOCK CLERKS	1695	17.3	90	165	255	1.6	GAIN
4190	SUPERV:CLERICAL:NEC	160	1.6	-170	-5	-175	-7.1	LOSS
4197	GEN OFF CLERKS	500	5.1	-185	90	-95	-1.7	LOSS
4199	OTHER CLERICAL:NEC	155	1.6	-160	30	-130	-5.9	LOSS
CLERICAL	TOTAL	9825	100.0	-875	1050	175	0.2	
83	MACHINING							
8311	TOOL & DIE MAKING	1915	10.6	520	20	540	3.4	GAIN
8313	MACHINIST	1785	9.9	-720	-25	-745	-3.4	LOSS
8315	MACHINE TOOL OP	1300	7.2	-900	35	-865	-5.0	LOSS
8316	INSPECT:METAL MACH	895	5.0	-105	-45	-150	-1.5	LOSS
8330	SUPERV METAL SHAPE	265	1.5	120	-5	115	5.9	GAIN
8333	SHEETMETAL WORKERS	1410	7.8	730	225	955	12.0	GAIN
8334	MET-WORK-MACH OP:NEC	3130	17.4	25	370	395	1.4	GAIN
8335	WELDING	5020	27.9	1080	230	1310	3.1	GAIN
8393	FILING.GRINDING:NEC	935	5.2	-400	20	-380	-3.4	LOSS
MACHINING	TOTAL	18015	100.0	415	945	1360	0.8	
85	FABRICATING							
8510	SUPERV FAB.ASSEMB:NEC	3040	7.3	600	110	710	2.7	GAIN
8511	ENGINE FAB.ASSM:NEC	2470	5.9	1015	705	1720	12.7	GAIN
8513	AUTO FAB.ASSM:NEC	19010	45.8	3615	1525	5140	3.2	GAIN
8526	INSPECTING:MET PROD:NEC	4175	10.0	685	265	950	2.6	GAIN
8533	ELEC EQUIP REPAIR:NEC	1225	2.9	750	0	750	9.9	GAIN
8581	AUTO MECHANICS	3100	7.5	-1090	10	-1080	-2.9	LOSS
8584	INDUST.FARM MECHANICS	2150	5.2	1080	20	1100	7.4	GAIN
FABRICATING	TOTAL	41545	100.0	6805	2170	8975	2.5	

4.11 Machinery and Other Transportation Equipment

In 1981, this sector employed approximately 93,000 persons in Ontario. The annual employment growth rate of this sector (3.3 percent) is higher than the overall average (2.8 percent) for all industries. Consequently, this sector's employment share has increased from 2.1 percent in 1971 to 2.2 percent in 1981. The industry has created 25,950 new jobs during the last 10 years, accounting for about 2.6 percent of total employment growth in Ontario.

Five occupational groups contribute to most employment. These are: Fabricating, Assembling and Repairing occupations; Machining occupations; Clerical occupations; Natural Sciences, Engineering and Mathematics occupations; and Managerial and Administrative occupations. These occupational groups together account for 85 percent of total employment in this industry.

4.11.1 Occupation Distribution Within the Industry

- Fabricating, Assembling and Repairing occupations and Machining occupations are highly concentrated in this sector. These 2 occupational groups together account for almost half (49.4 percent) of the total employment.
- With the exception of Clerical occupations, males account for at least 85 percent of employment in the major occupational groups.
- In the case of Clerical occupations, the proportion of males in this sector is also higher than the overall average for all industries.

FIGURE 39
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY, ONTARIO, 1981

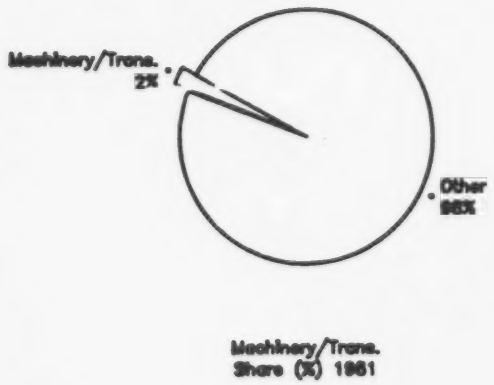
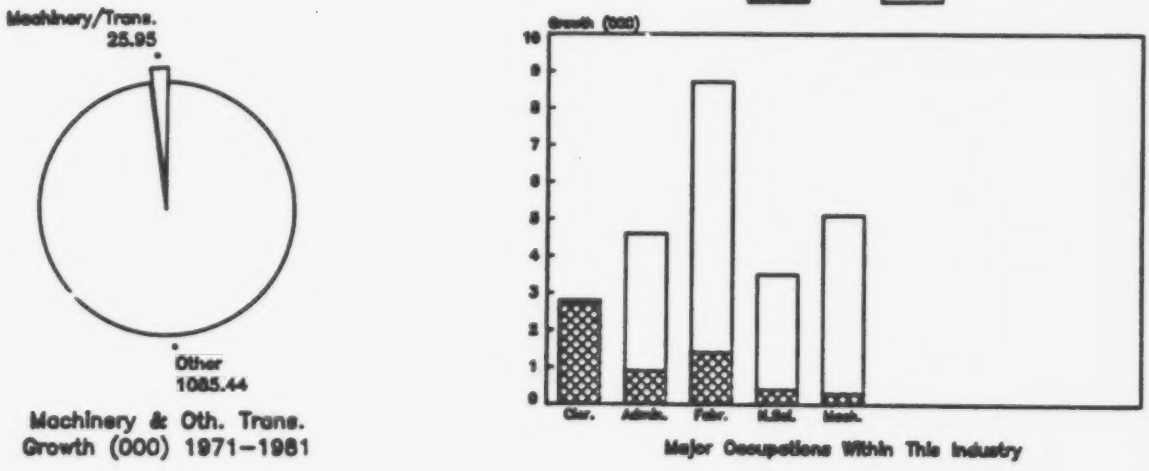


FIGURE 40
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY, ONTARIO, 1971 - 1981



4.11.2 Occupational Employment Growth within the Industry

- Employment in this sector grew by 25,950 jobs between 1971 and 1981, about 19,800 for males and 6,100 for females.

- Fabricating, Assembling and Repairing occupations are the leading contributor to employment growth in this sector (8,690), followed by Machining occupations (5,120), Managerial and Administrative occupations (4,600), and Natural Sciences, Engineering and Mathematics occupations (3,500).

- Managerial and Administrative occupations have more than doubled in size during this period.

4.11.3 **Occupational Employment Growth Rates Within the Industry**

- Among the major occupational groups, Managerial and Administrative occupations have the highest annual employment growth rate (8.3 percent), followed by Natural Sciences, Engineering and Mathematics occupations (4.8 percent), and Fabricating, Assembling and Repairing occupations (4.3 percent).

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within the sector: Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; and Fabricating, Assembling and Repairing occupations.

- Conversely, Machining occupations and Clerical occupations have lost in employment share within the sector because of lower than average employment growth rates.

- On balance, this sector has gained in employment share among the 23 industry sectors.

FIGURE 41
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY, ONTARIO, 1971 - 1981

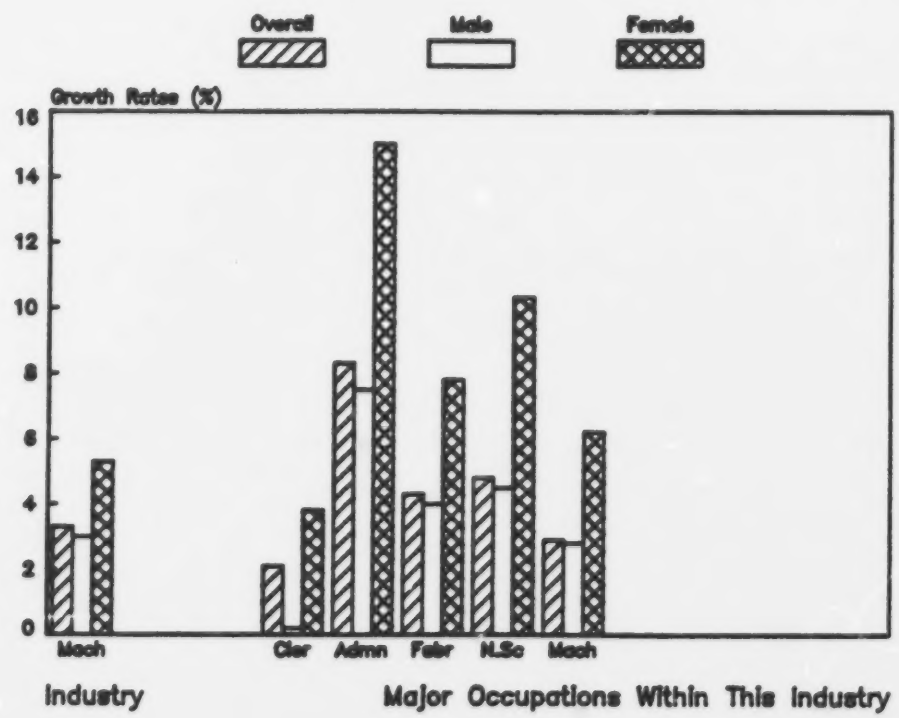


TABLE 19
SELECTED 4-DIGIT OCCUPATIONS IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	660	7.9	140	5	145	2.5	LOSS
1131	MANAGERS:NATURAL SCI	505	6.0	440	5	445	23.7	GAIN
1136	PERSONNEL MGMT OCCS	310	3.7	195	55	250	17.8	GAIN
1137	SALES MGMT OCCS	1060	12.6	680	80	760	13.5	GAIN
1141	PURCHASING MGMT OCCS	325	3.9	180	35	215	11.4	GAIN
1143	PRODUCTION MGMT OCCS	1360	16.2	1080	45	1125	19.2	GAIN
1149	MGMT: NEC	820	9.8	410	125	535	11.1	GAIN
1171	FINANCIAL OFFICERS	1560	18.6	515	255	770	7.0	LOSS
1175	PURCHASING OFFICERS	680	8.1	100	125	225	4.1	LOSS
1179	OCCS IN MGMT:NEC	480	5.7	-265	105	-160	-2.8	LOSS
MAN. & ADMIN.	TOTAL	8390	100.0	3685	915	4600	8.3	
21	NATURAL SCI.							
2144	ELECTRICAL ENGINEERS	760	8.1	390	20	410	8.1	GAIN
2145	INDUSTRIAL ENGINEERS	1425	15.2	305	60	365	3.0	LOSS
2147	MECHANICAL ENGINEERS	1410	15.0	425	35	460	4.0	LOSS
2155	AEROSPACE ENGINEERS	565	6.0	250	20	270	6.7	GAIN
2160	SUPERVISORS:ARCH. ENG	225	2.4	175	0	175	16.2	GAIN
2163	DRAUGHTING OCCUPATIONS	1415	15.1	390	55	445	3.8	LOSS
2165	ENGINEERING TECHN	1595	17.0	865	75	940	9.3	GAIN
2183	SYSTEMS ANALYSTS	1510	16.1	225	130	355	2.7	LOSS
NATURAL SCI.	TOTAL	9400	100.0	3110	390	3500	4.8	
41	CLERICAL							
4111	SECRETARIES & STENO	2180	14.3	5	645	650	3.6	GAIN
4113	TYPISTS & CLERK-TYP	685	4.5	-15	-130	-145	-1.9	LOSS
4131	BOOKKEEPERS	2765	18.1	-295	825	530	2.2	GAIN
4143	EDP EQUIP OPERATORS	1015	6.6	40	210	250	2.9	GAIN
4150	SUPERV:RECORD.SCHED	600	3.9	150	25	175	3.5	GAIN
4151	PRODUCTION CLERKS	1310	8.6	200	185	385	3.5	GAIN
4153	SHIPPING CLERKS	1830	12.0	615	140	755	5.5	GAIN
4155	STOCK CLERKS	1810	11.9	95	345	440	2.8	GAIN
4190	SUPERV:CLERICAL:NEC	155	1.0	-310	-30	-340	-11.0	LOSS
4197	GEN OFF CLERKS	905	5.9	-165	215	50	0.6	LOSS
CLERICAL	TOTAL	15265	100.0	110	2710	2820	2.1	
83	MACHINING							
8311	TOOL & DIE MAKING	1420	6.9	115	90	205	1.6	LOSS
8313	MACHINIST	4895	23.7	2120	60	2180	6.1	GAIN
8315	MACHINE TOOL OP	2440	11.8	-910	-25	-935	-3.2	LOSS
8333	SHEETMETAL WORKERS	1270	6.1	585	15	600	6.6	GAIN
8334	MET-WORK-MACH OP:NEC	1320	6.4	185	20	205	1.7	LOSS
8335	WELDING	6270	30.3	2350	140	2490	5.2	GAIN
MACHINING	TOTAL	20695	100.0	4775	345	5120	2.9	
85	FABRICATING							
8510	SUPERV FAB.ASSEMB:NEC	2185	8.7	1190	20	1210	8.4	GAIN
8515	AIRCRAFT FAB.ASSM:NEC	3065	12.2	775	65	840	3.3	LOSS
8523	IND MACH FAB.ASSM:NEC	3050	12.1	1630	115	1745	8.9	GAIN
8526	INSPECTING:MET PROD:NEC	1630	6.5	520	150	670	5.4	GAIN
8533	ELEC EQUIP REPAIR:NEC	1895	4.4	635	80	715	11.2	GAIN
8584	INDUST.FARM MECHANICS	1600	6.4	410	10	420	3.1	LOSS
8585	BUSINESS MACH REPAIR	565	2.2	-585	0	-585	-6.9	LOSS
8592	MARINE CRAFT FAB	1525	6.1	820	60	880	9.0	GAIN
8595	PAINTING. DECORATING	1070	4.3	585	5	590	8.3	GAIN
FABRICATING	TOTAL	25155	100.0	7325	1365	8690	4.3	

4.12 Electrical Products

In 1981, this industry sector employed 83,200 persons, approximately 2 percent of total employment in Ontario. Employment in this sector has increased by about 1.8 percent per year over the 1971-1981 period, which is considerably lower than the annual aggregate average of 2.8 percent for all industries. Consequently, this sector's employment share has decreased slightly from 2.2 percent in 1971 to 2 percent in 1981. Notwithstanding a lower rate of employment growth, this sector has created almost 14,000 jobs over this period.

The five largest occupational groups in this sector are: Fabricating, Assembling and Repairing occupations; Clerical occupations; Natural Sciences, Engineering and Mathematics occupations; Machining occupations; and Managerial and Administrative occupations. In addition, Processing occupations also have high employment growth over this period. Together, these 6 occupational groups account for almost 87 percent of total employment.

4.12.1 Occupational Distribution Within the Industry

- Three occupational groups in this sector exhibit relatively higher employment concentration when compared with the overall occupation distribution for all industries. They are: Fabricating, Assembling and Repairing occupations; Machining occupations; and Natural Sciences, Engineering and Mathematics occupations.

- Females also have relatively high employment concentration in Machining occupations and Fabricating, Assembling and Repairing occupations.

FIGURE 42
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO, 1981

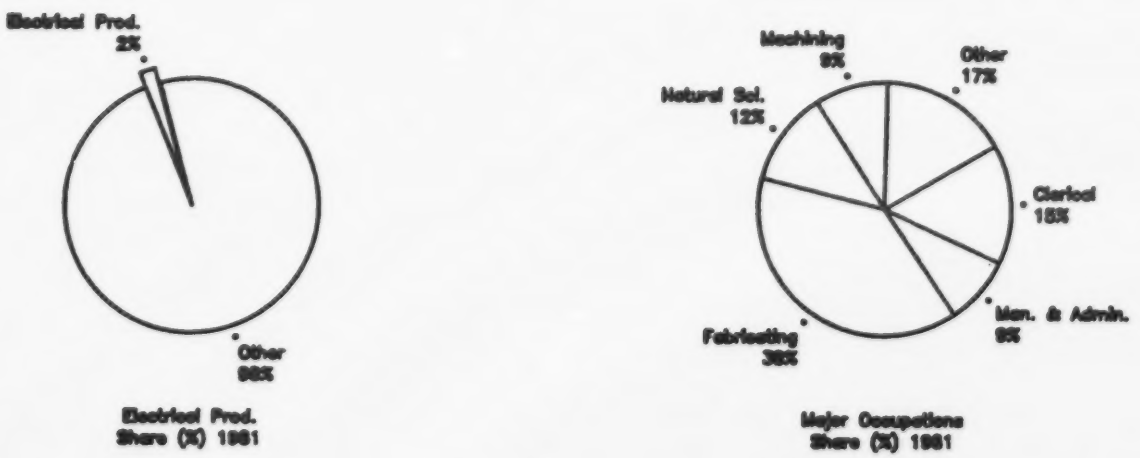
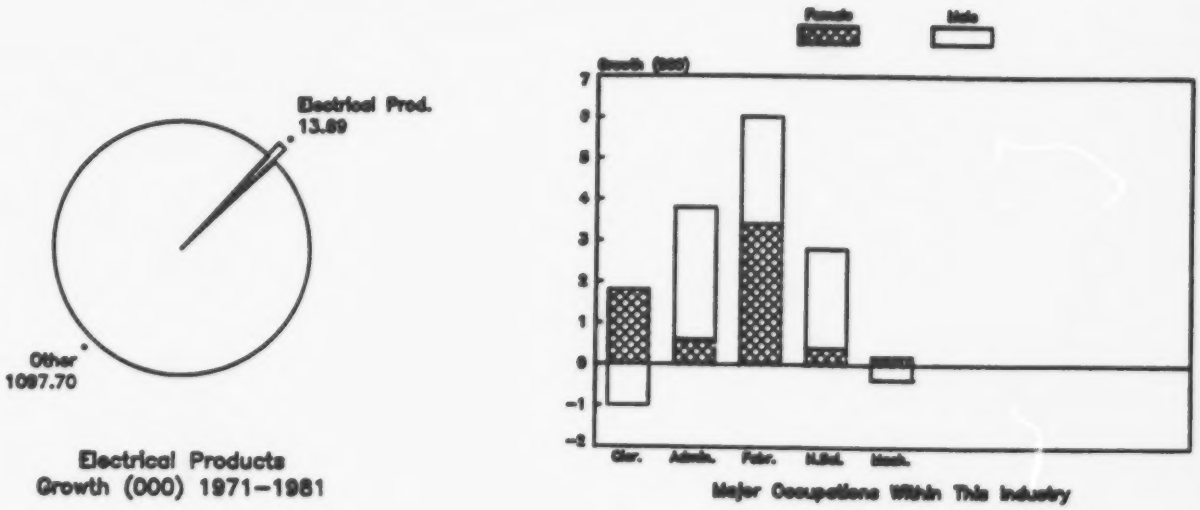


FIGURE 42
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981



4.12.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, approximately 13,690 new jobs have been created in this sector. While females account for only 36.5 percent of employment, they make up almost 53 percent of the job gains.

- Fabricating, Assembling and Repairing occupations are the leading contributor to employment growth (5,980), followed by Managerial and Administrative occupations (3,790), Natural Sciences, Engineering and Mathematics occupations (2,810), Processing occupations (1,040), and Clerical occupations (790).

- The remaining occupational groups in this sector have either little or negative employment growth over this period.

4.12.3 Occupational Employment Growth Rates Within the Industry

- Among the six selected occupational groups in this sector, Managerial and Administrative occupations have the highest annual rate of employment growth (7.8 percent), followed by Processing occupations (5 percent), and Natural Sciences, Engineering and Mathematics occupations (3.4 percent).

- With the exception of Processing occupations, employment growth rates for females are higher than those for males.

- The following 4 occupational groups have gained in employment share because of higher than average employment growth rates within this sector: Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; Fabricating, Assembling and Repairing occupations; and Processing occupations.

- Conversely, Clerical occupations and Machining occupations have lost in employment share within this sector.

- The industry as a whole, however, has lost in employment share among the 23 industry sectors.

FIGURE 44
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981

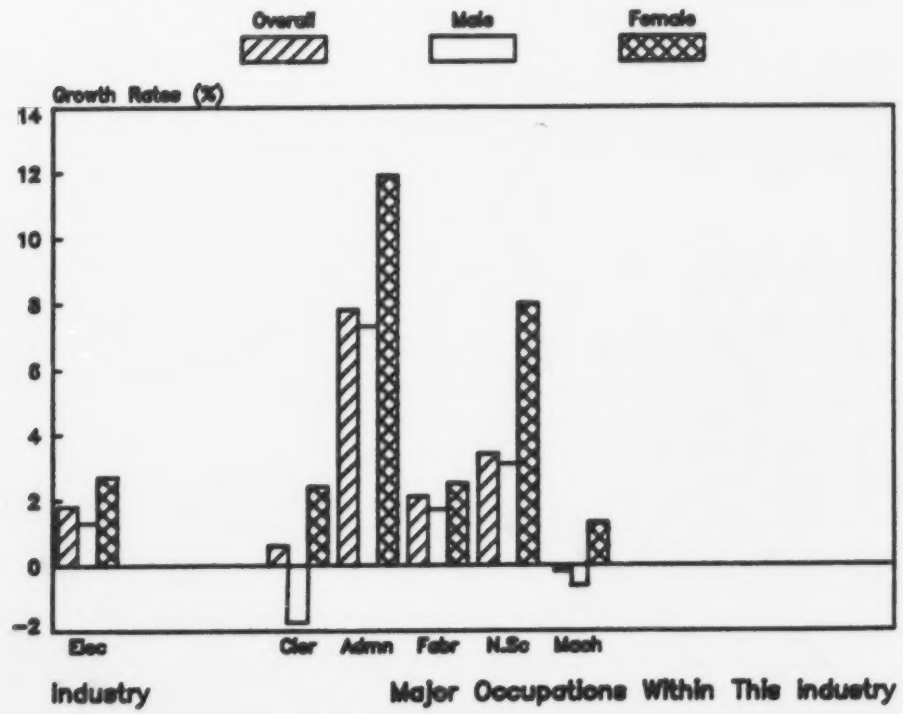


TABLE 20
SELECTED 4-DIGIT OCCUPATIONS IN THE ELECTRICAL PRODUCTS INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	605	8.4	195	-5	190	3.8	LOSS
1131	MANAGERS:NATURAL SCI	350	4.9	255	15	270	15.9	GAIN
1136	PERSONNEL MGMT OCCS	285	4.0	215	60	275	39.8	GAIN
1137	SALES MGMT OCCS	935	13.0	685	40	725	16.1	GAIN
1143	PRODUCTION MGMT OCCS	1390	19.4	1140	50	1190	21.4	GAIN
1149	MGMT: NEC	520	7.2	290	45	335	10.9	GAIN
1171	FINANCIAL OFFICERS	1155	16.1	260	90	350	3.7	LOSS
1175	PURCHASING OFFICERS	570	7.9	25	100	125	2.5	LOSS
1179	OCCS IN MGMT:NEC	450	6.3	-255	90	-165	-3.1	LOSS
MAN. & ADMIN.	TOTAL	7175	100.0	3160	635	3795	7.8	
21	NATURAL SCI.							
2144	ELECTRICAL ENGINEERS	2575	25.9	815	40	855	4.1	GAIN
2145	INDUSTRIAL ENGINEERS	1290	13.0	120	35	155	1.3	LOSS
2147	MECHANICAL ENGINEERS	460	4.6	120	0	120	3.1	LOSS
2163	DRAUGHTING OCCUPATIONS	1205	12.1	70	135	205	1.9	LOSS
2165	ENGINEERING TECHN	2875	29.0	880	150	1030	4.5	GAIN
2183	SYSTEMS ANALYSTS	900	9.1	330	135	465	7.5	GAIN
NATURAL SCI.	TOTAL	9925	100.0	2375	435	2810	3.4	
41	CLERICAL							
4111	SECRETARIES & STENO	1810	14.2	-5	160	155	0.9	GAIN
4113	TYPISTS & CLERK-TYP	635	5.0	-5	-285	-290	-3.7	LOSS
4131	BOOKKEEPERS	2165	16.9	-305	510	205	1.0	GAIN
4143	EDP EQUIP OPERATORS	975	7.6	140	400	540	8.4	GAIN
4150	SUPERV:RECORD.SCHED	530	4.1	110	40	150	3.4	GAIN
4151	PRODUCTION CLERKS	855	6.7	-205	220	15	0.2	LOSS
4153	SHIPPING CLERKS	1705	13.3	160	170	330	2.2	GAIN
4155	STOCK CLERKS	1330	10.4	-175	300	125	1.0	GAIN
4190	SUPERV:CLERICAL:NEC	150	1.2	-210	-60	-270	-9.8	LOSS
4197	GEN OFF CLERKS	780	6.1	-185	0	-185	-2.1	LOSS
CLERICAL	TOTAL	12780	100.0	-980	1775	795	0.6	
81	PROCESSING							
8130	SUPERV METAL PROCES	140	5.2	0	15	15	1.1	LOSS
8137	METAL MOULDING	150	5.6	20	30	50	4.1	LOSS
8141	METAL EXTRUDING	865	32.3	430	5	435	7.2	GAIN
8143	METAL PLATING	195	7.3	-65	-15	-80	-3.4	LOSS
8149	METAL PROCESSING:NEC	735	27.4	410	95	505	12.3	GAIN
PROCESSING	TOTAL	2680	100.0	920	120	1040	5.0	
83	MACHINING							
8311	TOOL & DIE MAKING	580	7.5	-145	-10	-155	-2.3	LOSS
8313	MACHINIST	1340	17.2	115	5	120	0.9	GAIN
8315	MACHINE TOOL OP	810	10.4	-550	-25	-575	-5.2	LOSS
8333	SHEETMETAL WORKERS	400	5.1	125	25	150	4.8	GAIN
8334	MET-WORK-MACH OP:NEC	830	10.7	-120	35	-85	-1.0	LOSS
8335	WELDING	2430	31.2	195	70	265	1.2	GAIN
8339	METAL SHAPING:NEC	380	4.9	125	50	175	6.4	GAIN
MACHINING	TOTAL	7785	100.0	-300	210	-90	-0.1	
85	FABRICATING							
8530	SUPERV ELEC FAB,ASSM	2705	8.5	225	185	410	1.7	LOSS
8531	ELEC EQUIP FAB,ASSM	10720	33.7	595	915	1510	1.5	LOSS
8534	ELECTRONIC EQUIP FAB	6825	21.5	760	1520	2280	4.1	GAIN
8535	ELECTRONIC OCCS:NEC	1080	3.4	470	340	810	14.9	GAIN
8536	INSPECTING:ELEC EQ	3750	11.8	575	270	845	2.6	GAIN
8584	INDUST.FARM MECHANICS	635	2.0	330	15	345	8.2	GAIN
FABRICATING	TOTAL	31785	100.0	2605	3380	5985	2.1	

4.13 Chemicals, Rubber and Petroleum

There were 100,400 persons employed in the Chemicals, Rubber and Petroleum industry in Ontario in 1981. Between 1971 and 1981, this sector has created 25,840 new jobs, about 2.6 percent of total employment growth in Ontario. Since the annual employment growth rate of this sector (3 percent) is marginally higher than the overall average (2.8 percent) for all industries, this sector's employment share has increased from 2.4 percent in 1971 to 3 percent in 1981.

Seven occupations are dominant in this sector; together they account for approximately 84 percent of total employment. These occupational groups are: Fabricating, Assembling and Repairing occupations; Processing occupations; Clerical occupations; Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; Material Handling occupations; and Sales occupations.

4.13.1 Occupational Distribution Within the Industry

- When compared with the overall occupational distribution for all industries, the following occupations are highly concentrated in this sector: Processing occupations, Natural Sciences, Engineering, and Mathematics occupations; and Material Handling occupations.

- Males have high employment concentration in Sales occupations, while females have high representation in Material Handling occupations.

- The employment share of Sales occupations has dropped from 6.9 percent in 1971 to 4.5 percent in 1981.

FIGURE 45
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO, 1981

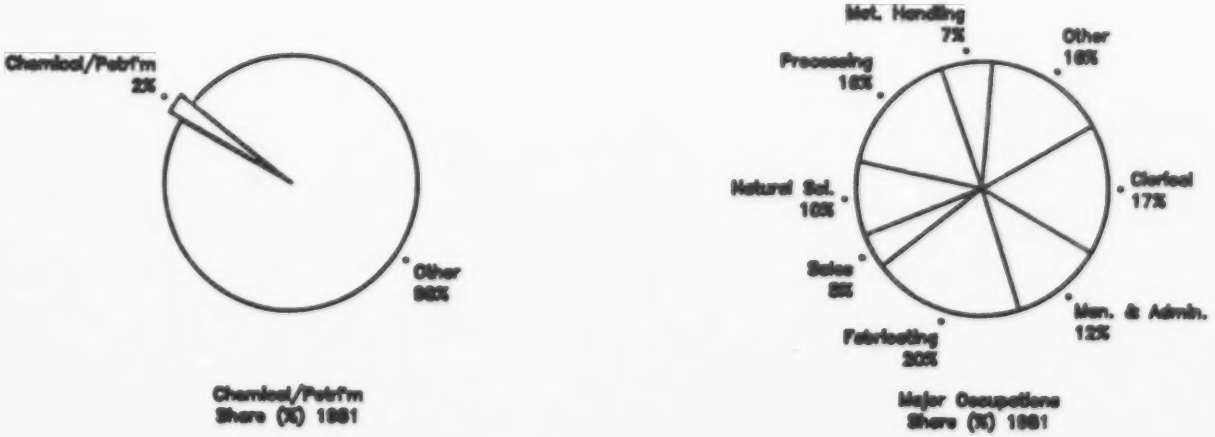
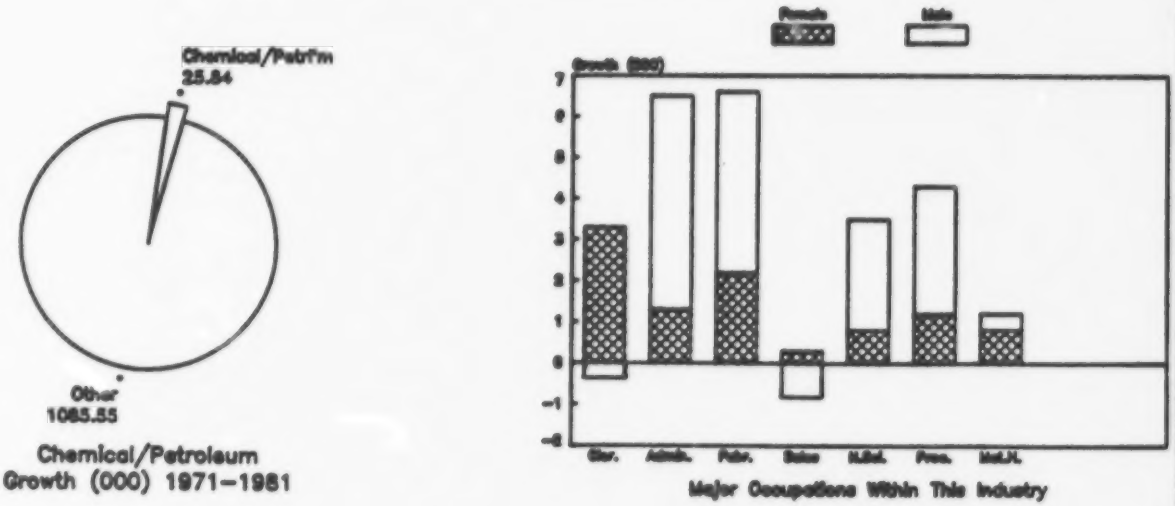


FIGURE 46
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO, 1971 - 1981



4.13.2 **Occupational Growth within the Industry**

- Employment in this sector rose by 25,840 between 1971 and 1981, about 14,900 for males and 11,000 for females.

- Fabricating, Assembling and Repairing occupations have made the most significant contribution to employment growth in this sector (6,590), followed by Managerial and Administrative occupations (6,520); Processing occupations (4,300); and Natural Sciences, Engineering and Mathematics occupations (3,460).

- Sales occupations have lost 800 salesmen and gained 300 saleswomen for a net loss of about 500 jobs over this period.

- Males account for most of the new jobs in the following occupational groups: Fabricating, Assembling and Repairing occupations; Managerial and Administrative occupations; Processing occupations; and Natural Sciences, Engineering and Mathematics occupations.

- Managerial and Administrative occupations have more than doubled in size during this period.

4.13.3 Occupational Growth Rates Within the Industry

- Among the major occupational groups, Managerial and Administrative occupations have the highest annual employment growth rate (8.6 percent), followed by Natural Sciences, Engineering and Mathematics occupations (4.5 percent), and Fabricating, Assembling and Repairing occupations (4.2 percent).

- In contrast, Sales occupations have a negative employment growth rate of 2.1 percent per year.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within the sector: Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; Fabricating, Assembling and Repairing occupations; and Processing occupations.

- Conversely, the following occupational groups have lost in employment share with the sector: Clerical occupations; Material Handling occupations; and Sales occupations.

- For the industry as a whole, Chemicals, Rubber and Petroleum has gained in employment share among the 23 industry sectors.

FIGURE 47
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO, 1971 - 1981

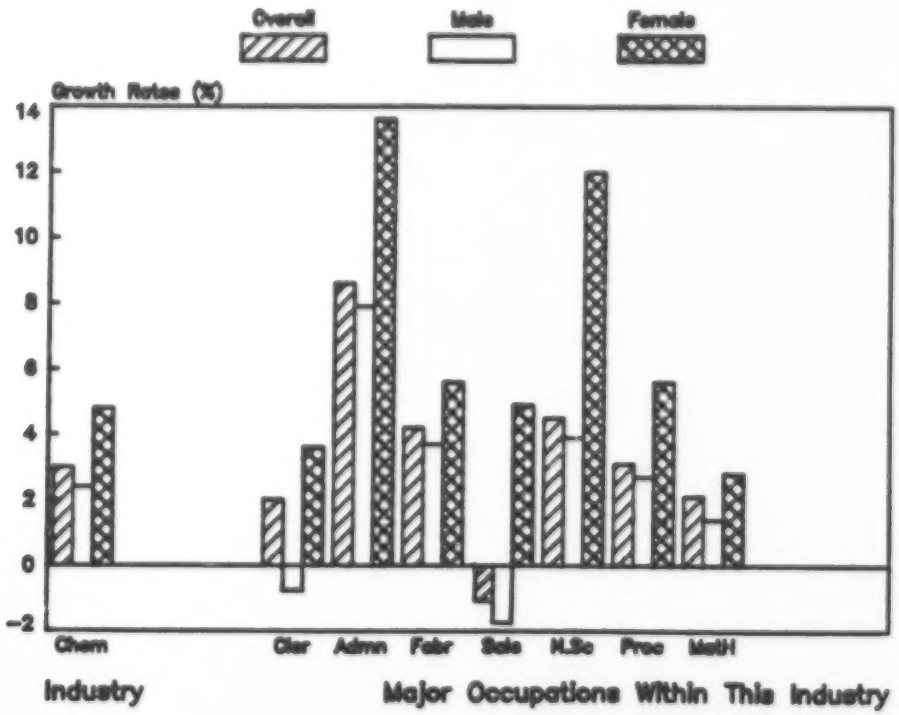


TABLE 21
SELECTED 4-DIGIT OCCUPATIONS IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	1150	9.9	300	15	315	3.3	LOSS
1131	MANAGERS:NATURAL SCI	440	3.8	320	0	320	13.9	GAIN
1135	MGRS: FINANCIAL	330	2.8	240	75	315	36.2	GAIN
1136	PERSONNEL MGMT OCCS	395	3.4	275	60	335	20.7	GAIN
1137	SALES MGMT OCCS	2085	18.0	1505	200	1705	18.6	GAIN
1143	PRODUCTION MGMT OCCS	2230	19.2	1685	125	1810	18.2	GAIN
1149	MGMT: NEC	1000	8.6	535	190	725	13.8	GAIN
1171	FINANCIAL OFFICERS	1795	15.5	325	285	610	4.2	LOSS
1175	PURCHASING OFFICERS	555	4.8	90	125	215	5.0	LOSS
1179	OCCS IN MGMT:NEC	760	6.5	-295	140	-155	-1.8	LOSS
MAN. & ADMIN.	TOTAL	11610	100.0	5230	1295	6525	8.6	
21	NATURAL SCI.							
2111	CHEMISTS	1595	16.5	460	215	675	5.7	GAIN
2117	PHYSICAL SCI TECHN	1685	17.4	-150	45	-105	-0.6	LOSS
2142	CHEMICAL ENGINEERS	1340	13.9	410	60	470	4.4	LOSS
2143	CIVIL ENGINEERS	255	2.6	155	5	160	10.4	GAIN
2145	INDUSTRIAL ENGINEERS	850	8.8	175	15	190	2.6	LOSS
2147	MECHANICAL ENGINEERS	610	6.3	165	10	175	3.4	LOSS
2163	DRAUGHTING OCCUPATIONS	400	4.1	145	65	210	7.7	GAIN
2165	ENGINEERING TECHN	1140	11.8	655	220	875	15.7	GAIN
2183	SYSTEMS ANALYSTS	935	9.7	325	135	460	7.8	GAIN
NATURAL SCI.	TOTAL	9645	100.0	2680	765	3445	4.5	
41	CLERICAL							
4111	SECRETARIES & STENO	3070	18.4	-10	680	670	2.5	GAIN
4113	TYPISTS & CLERK-TYP	710	4.3	-45	-120	-165	-2.1	LOSS
4131	BOOKKEEPERS	3405	20.4	-175	1095	920	3.2	GAIN
4143	EDP EQUIP OPERATORS	1035	6.2	85	440	525	7.3	GAIN
4151	PRODUCTION CLERKS	655	3.9	15	180	195	3.6	GAIN
4153	SHIPPING CLERKS	2495	15.0	320	320	640	3.9	GAIN
4155	STOCK CLERKS	1005	6.0	25	145	170	1.9	LOSS
4171	RECEPTIONISTS	465	2.8	0	190	190	5.4	GAIN
4190	SUPERV:CLERICAL:NEC	225	1.3	-360	-30	-390	-9.6	LOSS
4197	GEN OFF CLERKS	880	5.3	-130	145	15	0.2	LOSS
CLERICAL	TOTAL	16670	100.0	-375	3315	2940	2.0	
51	SALES							
5130	SUPERV:SALES.COM	445	9.7	-1110	35	-1075	-11.6	LOSS
5131	TECHNICAL SALESMEN	280	6.1	85	20	105	4.8	GAIN
5133	COMMERCIAL TRAVELLER	3115	68.2	670	225	895	3.4	GAIN
5135	SALESPERSONS COM:NEC	535	11.7	-345	75	-270	-4.8	LOSS
SALES	TOTAL	4565	100.0	-825	275	-550	-1.1	
81	PROCESSING							
8160	SUPERV CHEMICALS	2530	15.7	335	145	480	2.1	LOSS
8161	MIXING:CHEMICALS	2605	16.1	590	255	845	4.0	GAIN
8165	DISTILLING:CHEMICALS	550	3.4	190	30	220	5.2	GAIN
8176	INSPECTING:CHEMICALS	1335	8.3	490	210	700	7.7	GAIN
8178	LABOUR:CHEMICALS	1045	6.6	-35	95	60	0.6	LOSS
8179	CHEMICALS:NEC	6315	39.1	1595	395	1990	3.9	GAIN
PROCESSING	TOTAL	16160	100.0	3045	1240	4285	3.1	
85	FABRICATING							
8570	SUPERV RUB,PLASTIC	1955	10.0	425	135	780	5.2	GAIN
8571	BONDING & CEMENTING	1940	9.9	270	70	340	1.9	LOSS
8573	MOULDING:RUB,PLASTIC	2380	12.2	690	460	1150	6.8	GAIN
8576	INSPECT:RUB.PLASTIC	1120	5.7	195	190	385	4.3	GAIN
8578	LABOUR:RUBBER.PLASTIC	2450	12.5	685	150	835	4.3	GAIN
8579	FAB RUBBER.PLAST:NEC	3550	18.2	570	1050	1620	6.3	GAIN
8584	INDUST.FARM MECHANICS	2210	11.3	1105	5	1110	7.2	GAIN
FABRICATING	TOTAL	19545	100.0	4340	2230	6590	4.2	
93	MAT. HANDLING							
9313	LONGSHORE WORKERS	575	8.7	10	20	30	0.5	LOSS
9315	MAT-HANDLING EQ OP:NEC	1000	15.2	320	35	355	4.5	GAIN
9317	PACKAGING OCCS:NEC	4170	63.4	45	730	775	2.1	LOSS
9319	OTHER MAT-HAND:NEC	360	5.5	150	15	165	4.3	GAIN
MAT. HANDLING	TOTAL	6580	100.0	430	800	1230	2.1	

4.14 Non-Metallic Mineral Products

This sector employed 28,600 persons in 1981, approximately 0.7 percent of total employment in Ontario. This sector created almost 2,000 jobs between 1971 and 1981, accounting for about 0.2 percent of employment growth in the province. Since the annual employment growth rate (0.7 percent) of the sector is lower than the annual aggregate employment growth rate (2.8 percent) for all industries, the employment share of Non-Metallic Mineral products has declined marginally from 0.8 percent in 1971 to 0.7 percent in 1981. Consequently, this sector remains as the third smallest employer in Ontario.

Nine occupational groups are highly represented in this industry; they together account for 87.8 percent of total employment. They are: Processing occupations; Clerical occupations; Machining occupations; Material Handling occupations; Transport Equipment Operating occupations; Managerial and Administrative occupations; Fabricating, Assembling and Repairing occupations; Construction Trades occupations; and Natural Sciences, Engineering and Mathematics occupations.

4.14.1 Occupational Distribution Within the Industry

- When compared with the overall occupational distribution for all industries, Processing occupations, Machining, and Material Handling occupations are highly concentrated in this sector.
- Among the major occupational groups, the employment concentration of male workers is particularly prevalent.
- For the whole industry, males account for almost 83 percent of total employment, which is considerably higher than the overall average of 58.5 percent for all industries.

FIGURE 48
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO, 1981

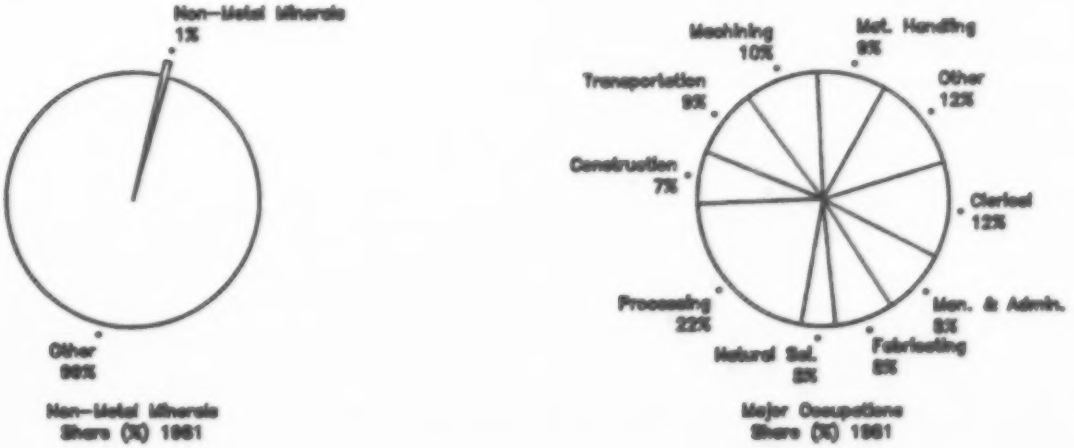
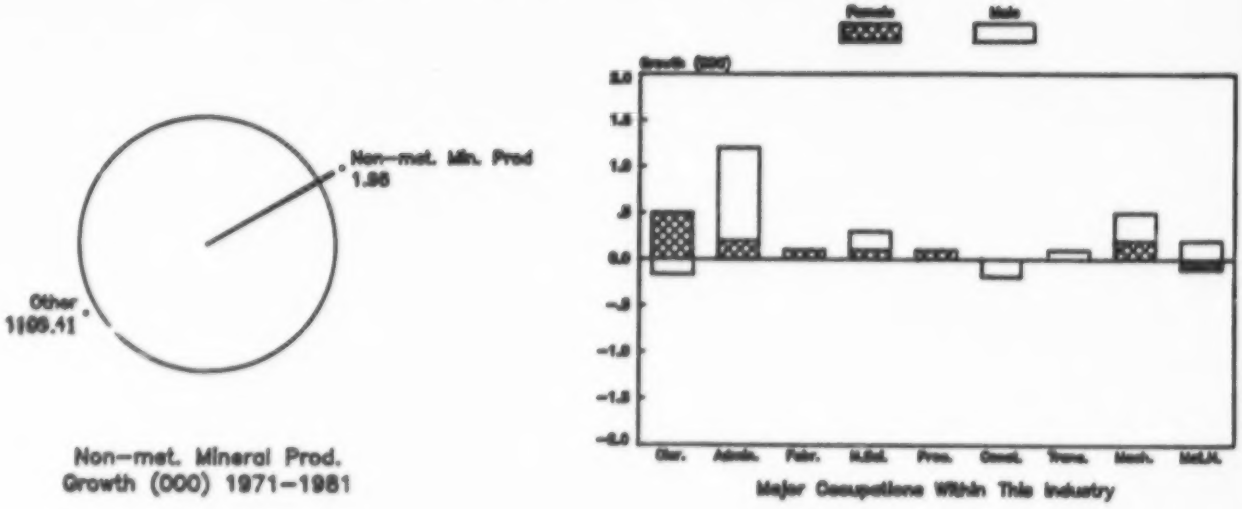


FIGURE 40
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981



4.14.2 Occupational Employment Growth Within the Industry

- Total employment in this sector rose by 1,980 over the 1971-1981 period, 700 for males and 1,300 for females.
- Managerial and Administrative occupations are the major contributor to employment growth (60.9 percent), followed by Machining occupations (27.3 percent).
- The employment growth of females is also prevalent in this sector; they account for approximately 17.2 percent of total employment but almost two-thirds of the increases in employment.

4.14.3 Occupational Employment Growth Rates Within the Industry

- Among the major occupational groups, Managerial and Administrative occupations have the highest annual employment growth rate (7.5 percent), followed by Natural Sciences, Engineering and Mathematics occupations (2.7 percent), and Machining occupations (2.2 percent).

- In contrast, Construction Trades occupations have a negative rate of employment growth (-1.1 percent).

- With the exception of Material Handling occupations and Construction Trade occupations, employment growth rates for females are much higher than those for males.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within the sector: Managerial and Administrative occupations; Machining occupations; Natural Sciences, Engineering and Mathematics occupations; and Clerical occupations.

- Conversely, the remaining major occupational groups have lost in employment share within the sector.

- On balance, this sector has lost in employment share among the 23 industry sectors.

FIGURE 50
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981

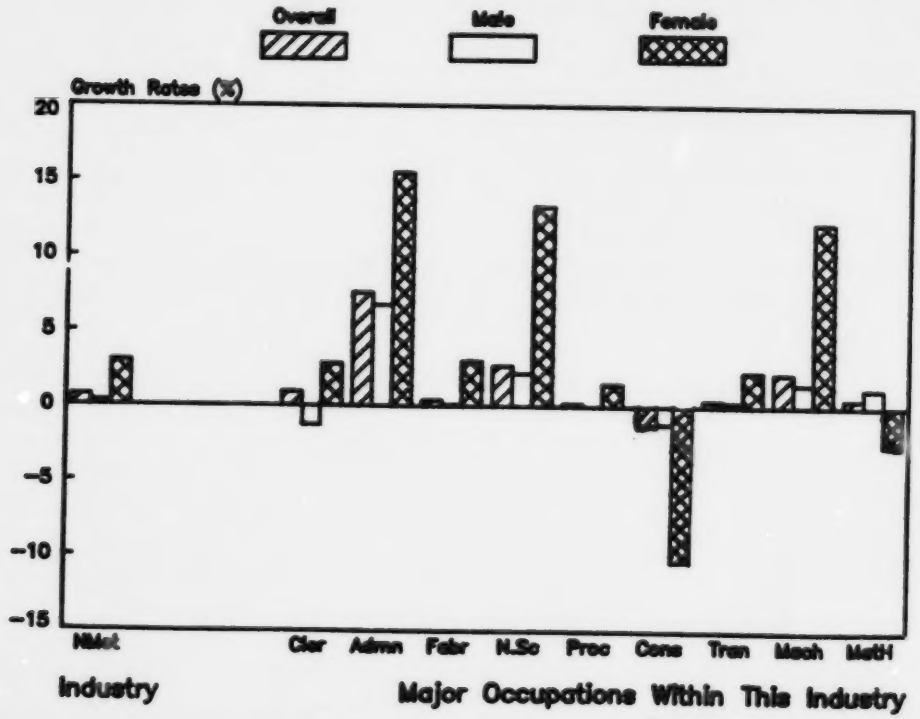


TABLE 22
SELECTED 4-DIGIT OCCUPATIONS IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	215	9.1	-25	-5	-30	-1.3	LOSS
1137	SALES MGMT OCCS	375	16.0	270	25	295	16.7	GAIN
1143	PRODUCTION MGMT OCCS	575	24.5	455	15	470	18.5	GAIN
1149	MGMT: NEC	280	11.9	125	95	220	16.7	GAIN
1171	FINANCIAL OFFICERS	330	14.0	5	30	35	1.1	LOSS
MAN. & ADMIN.	TOTAL	2350	100.0	900	225	1205	7.5	
21	NATURAL SCI.							
2117	PHYSICAL SCI TECHN	115	8.7	-35	10	-25	-1.9	LOSS
2145	INDUSTRIAL ENGINEERS	265	20.0	45	15	60	2.6	LOSS
2147	MECHANICAL ENGINEERS	125	9.4	-20	0	-20	-1.5	LOSS
2163	DRAUGHTING OCCUPATIONS	130	9.8	-30	0	-30	-2.1	LOSS
2165	ENGINEERING TECHN	210	15.8	135	15	150	13.3	GAIN
2183	SYSTEMS ANALYSTS	145	10.9	65	30	95	11.2	GAIN
NATURAL SCI.	TOTAL	1325	100.0	235	75	310	2.7	
41	CLERICAL							
4111	SECRETARIES & STENO	470	13.5	5	10	15	0.3	LOSS
4131	BOOKKEEPERS	865	24.8	-115	275	160	2.1	GAIN
4143	EDP EQUIP OPERATORS	210	6.0	60	90	150	13.3	GAIN
4150	SUPERV:RECORD.SCHED	235	6.7	75	15	90	4.9	GAIN
4153	SHIPPING CLERKS	520	14.9	-5	75	70	1.5	GAIN
4155	STOCK CLERKS	275	7.9	20	60	80	3.5	GAIN
4197	GEN OFF.CLERKS	195	5.6	-5	0	-5	-0.3	LOSS
CLERICAL	TOTAL	3490	100.0	-220	515	295	0.9	
81	PROCESSING							
8150	SUPERV GLASS.STONE	920	14.9	130	25	155	1.9	GAIN
8151	FURNACEMEN:GLASS	570	9.2	-120	25	-95	-1.5	LOSS
8153	SEPARATING:GLASS	320	5.2	40	15	55	1.9	GAIN
8155	FORMING:GLASS	1235	20.0	315	110	425	4.3	GAIN
8156	INSPECTING:GLASS	595	9.7	-150	-130	-280	-3.8	LOSS
8158	LABOUR:GLASS	935	15.2	220	15	235	2.9	GAIN
8159	CLAY.GLASS.STONE:NEC	1050	17.0	-365	55	-310	-2.6	LOSS
PROCESSING	TOTAL	6165	100.0	-10	120	110	0.2	
83	MACHINING							
8313	MACHINIST	190	7.0	-160	0	-160	-5.9	LOSS
8335	WELDING	295	10.9	-45	-5	-50	-1.6	LOSS
8370	SUPERV GLASS MACH	315	11.6	110	15	125	5.2	GAIN
8371	CUTTING.SHAPING:GLAS	660	24.4	180	25	205	3.8	GAIN
8373	ABRADING:GLASS.CLAY	190	7.0	40	25	65	4.3	GAIN
8376	INSPECT:GLASS MACH	245	9.0	120	75	195	17.2	GAIN
8379	GLASS.CLAY MACH:NEC	360	13.3	140	50	190	7.8	GAIN
MACHINING	TOTAL	2710	100.0	345	195	540	2.2	
85	FABRICATING							
8581	AUTO MECHANICS	200	9.2	0	-5	-5	-0.2	LOSS
8584	INDUST.FARM MECHANICS	875	40.2	500	0	500	8.8	GAIN
8589	OTHER MECHANICS:NEC	100	4.6	-55	0	-55	-4.3	LOSS
8595	PAINTING. DECORATING	120	5.5	5	25	30	2.9	GAIN
8599	OTHER PROD FAB:NEC	130	6.0	-45	30	-15	-1.1	LOSS
FABRICATING	TOTAL	2175	100.0	25	60	85	0.4	
87	CONSTRUCTION							
8733	CONSTR ELECTRICIANS	100	5.2	-25	0	-25	-2.2	LOSS
8780	SUPERV:OTHER CONSTR	225	11.7	-105	0	-105	-3.8	LOSS
8782	MASONS	190	9.9	55	0	55	3.5	GAIN
8795	GLAZIERS	105	5.5	25	-5	20	2.1	GAIN
8798	LABOUR:OTHER CONSTR	510	26.5	0	-15	-15	-0.3	GAIN
8799	OTHER CONSTR:NEC	315	16.4	80	0	80	3.0	GAIN
CONSTRUCTION	TOTAL	1925	100.0	-195	-30	-225	-1.1	
91	TRANSPORTATION							
9175	TRUCK DRIVERS	2305	93.7	30	0	30	0.1	LOSS
TRANSPORTATION	TOTAL	2460	100.0	80	5	85	0.4	
93	MAT. HANDLING							
9311	HOISTING OCCS:NEC	215	8.6	-45	0	-45	-1.9	LOSS
9313	LONGSHORE WORKERS	260	10.4	65	5	70	3.2	GAIN
9315	MAT-HANDLING EQ OP:NEC	875	34.9	240	10	250	3.4	GAIN
9317	PACKAGING OCCS:NEC	920	36.7	0	-140	-140	-1.4	LOSS
9319	OTHER MAT-HAND:NEC	155	6.2	35	0	35	2.6	GAIN
MAT. HANDLING	TOTAL	2510	100.0	230	-115	115	0.5	

4.15 Other Manufacturing Industries

This sector employed 61,100 workers in 1981, approximately 1.5 percent of all employed persons in Ontario. Since the annual employment growth rate of this sector (2.6 percent) is marginally lower than the annual aggregate employment growth rate (2.8 percent) for all industries, this sector's employment share has declined slightly in 1981.

Between 1971 and 1981, this sector created about 14,000 new jobs, 9,700 for females and 4,300 for males. This employment growth figure accounts for 1.4 percent of job increases in Ontario over this period.

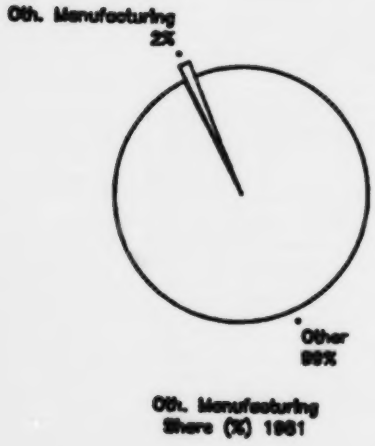
The five largest occupational groups in this sector are: Fabricating, Assembling and Repairing occupations; Clerical occupations; Managerial and Administrative occupations; Machining occupations; and Processing occupations. These 5 occupations together account for almost three quarters of employment in this sector.

4.15.1 Occupational Distribution Within the Industry

- When compared with the overall occupational distribution for all industries, Fabricating, Assembling and Repairing occupations as well as Machining occupations are highly concentrated in this sector. Female workers are also concentrated in these two occupational groups.

- For the industry as a whole, females account for almost 49 percent of total employment. This employment ratio is higher than the overall average of 41.5 percent for all industries.

FIGURE 51
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE OTHER MANUFACTURING INDUSTRY, ONTARIO, 1981



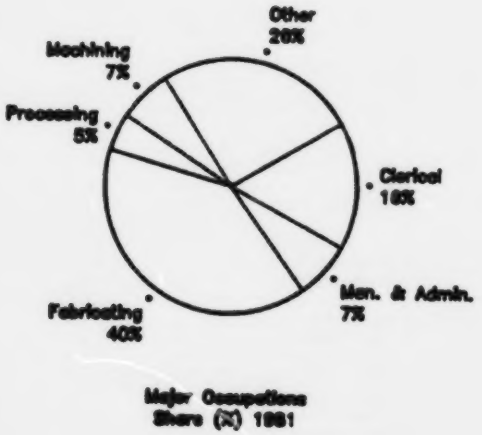
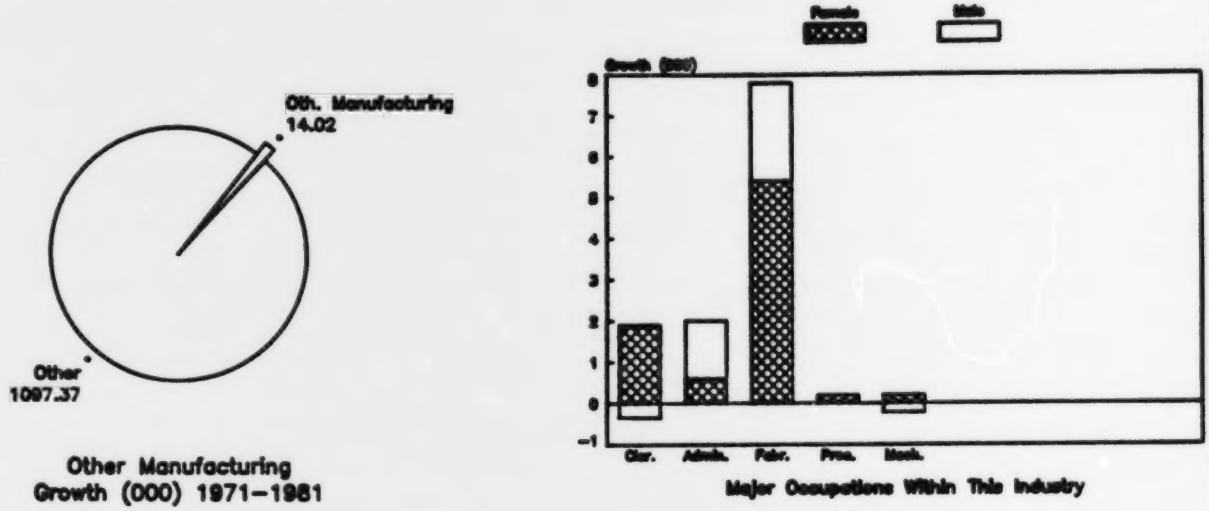


FIGURE 52
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE OTHER MANUFACTURING INDUSTRY, ONTARIO, 1971 - 1981



4.15.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in this sector rose by about 14,000 jobs, 9,700 for females and 4,300 for males.
- Fabricating, Assembling and Repairing occupations alone contribute more than half of the employment increases (55.4 percent) in this period.
- Other major contributors to employment growth in this sector include Managerial and Administrative occupations and Clerical occupations.
- Females make up most of the employment gains in the Fabricating, Assembling and Repairing occupations and Clerical occupations.

4.15.3 Occupational Employment Growth Rates Within the Industry

- Among the most employed occupational groups, Managerial and Administrative occupations have the highest annual rate of employment growth (6.2 percent), followed by Fabricating, Assembling and Repairing occupations (3.3 percent).

- Females have higher rates of growth than males in all of the major occupational groups.

- As a result of higher than average employment growth rates, the following occupations have gained in employment share within the sector over this period: Fabricating, Assembling and Repairing occupations; Managerial and Administrative occupations.

- Conversely, the following occupational groups have lost in employment share within the sector: Clerical occupations; Machining occupations; and Processing occupations.

- On balance, this industry sector has lost in employment share among the 23 industry sectors.

FIGURE 53
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE OTHER MANUFACTURING INDUSTRY, ONTARIO, 1971 - 1981

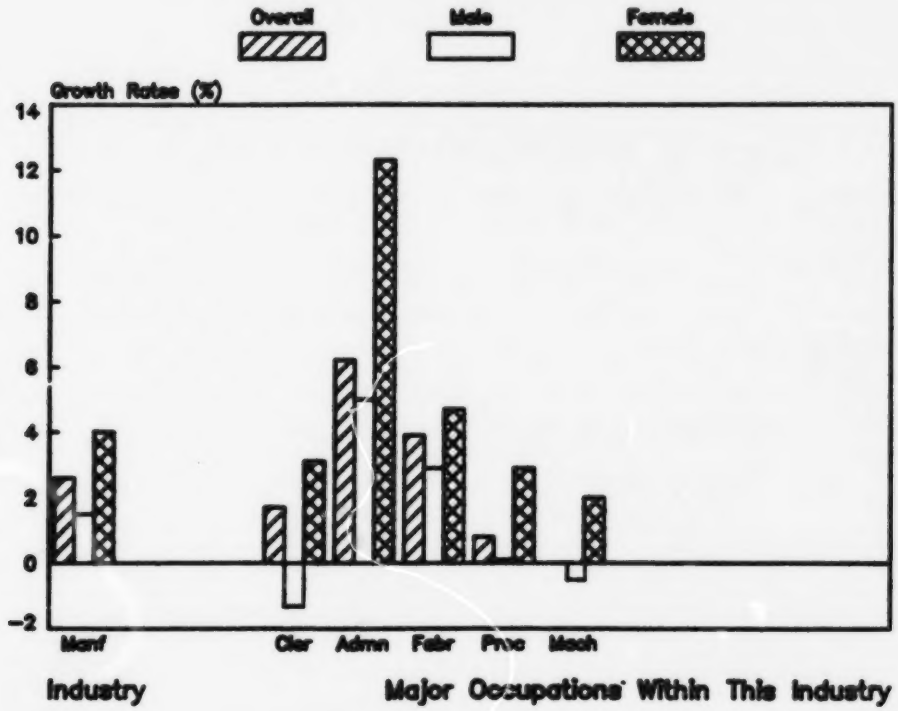


TABLE 23
SELECTED 4-DIGIT OCCUPATIONS IN THE OTHER MANUFACTURING INDUSTRIES INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	480	10.7	20	10	30	0.6	LOSS
1131	MANAGERS:NATURAL SCI	145	3.2	115	5	120	19.2	GAIN
1137	SALES MGMT OCCS	695	15.5	500	75	575	19.2	GAIN
1143	PRODUCTION MGMT OCCS	1055	23.6	735	110	845	17.5	GAIN
1149	MGMT: NEC	620	13.9	320	105	425	12.3	GAIN
1171	FINANCIAL OFFICERS	560	12.5	-80	115	35	0.6	LOSS
1179	OCCS IN MGMT:NEC	270	6.0	-255	75	-180	-5.0	LOSS
MAN. & ADMIN.	TOTAL	4470	100.0	1375	635	2010	6.2	
41	CLERICAL							
4111	SECRETARIES & STENO	1225	12.5	-20	170	150	1.3	LOSS
4113	TYPISTS & CLERK-TYP	455	4.6	-15	-70	-85	-1.7	LOSS
4131	BOOKKEEPERS	2130	21.8	-60	580	520	2.8	GAIN
4143	EDP EQUIP OPERATORS	550	5.6	-5	285	280	7.4	GAIN
4151	PRODUCTION CLERKS	430	4.4	35	150	185	5.8	GAIN
4153	SHIPPING CLERKS	1380	14.1	130	155	285	2.3	GAIN
4155	STOCK CLERKS	835	8.5	-50	180	130	1.7	LOSS
4190	SUPERV:CLERICAL:NEC	135	1.4	-155	-85	-240	-9.7	LOSS
4197	GEN OFF CLERKS	790	8.1	-10	210	200	3.0	GAIN
CLERICAL	TOTAL	9785	100.0	-355	1890	1535	1.7	
81	PROCESSING							
8137	METAL MOULDING	140	4.8	55	-10	45	4.0	GAIN
8149	METAL PROCESSING:NEC	200	6.9	145	20	165	19.0	GAIN
8161	MIXING:CHEMICALS	155	5.4	70	-5	65	5.6	GAIN
8179	CHEMICALS:NEC	180	6.2	65	25	90	7.2	GAIN
8295	HIDE & PELT PROCESS	740	25.6	-175	0	-175	-2.1	LOSS
8296	INSPECTING:PROC.NEC	165	5.7	20	50	70	5.7	GAIN
8298	LABOUR:PROCES.NEC	135	4.7	-10	10	0	0.0	LOSS
PROCESSING	TOTAL	2895	100.0	20	195	215	0.8	
83	MACHINING							
8311	TOOL & DIE MAKING	245	6.1	35	15	50	2.3	GAIN
8313	MACHINIST	585	14.6	-130	-60	-190	-2.8	LOSS
8315	MACHINE TOOL OP	265	6.6	-85	-40	-125	-3.8	LOSS
8333	SHEETMETAL WORKERS	280	7.0	110	30	140	7.2	GAIN
8334	MET-WORK-MACH OP:NEC	160	4.0	-50	-115	-165	-6.8	LOSS
8335	WELDING	525	13.1	105	90	195	4.8	GAIN
8373	ABRADING:GLASS.CLAY	515	12.8	-25	75	50	1.0	GAIN
8393	FILING.GRINDING:NEC	185	4.6	-85	25	-60	-2.8	LOSS
8395	PATTERNMAKERS:NEC	290	7.2	140	20	160	8.4	GAIN
MACHINING	TOTAL	4010	100.0	-175	180	5	0.0	
85	FABRICATING							
8527	PRECISION INST FAB:NEC	1220	5.0	195	445	640	7.7	GAIN
8551	PAT-MKING:TEX,LTH,FUR	1195	4.9	40	195	235	2.2	LOSS
8561	SHOEMAKING,REPAIRING	5825	24.0	270	1935	2205	4.9	GAIN
8563	SEWING MACHINE OCCS	1450	6.0	-75	230	155	1.1	LOSS
8569	FAB TEX,LTHR,FUR:NEC	1395	5.8	25	240	265	2.1	LOSS
8590	SUPERV:PROD FAB	1165	4.8	185	185	370	3.9	LOSS
8591	JEWELLERY FAB & REP	1640	6.8	320	275	595	4.6	GAIN
8599	OTHER PROD FAB:NEC	3470	14.3	460	900	1360	5.1	GAIN
FABRICATING	TOTAL	24230	100.0	2390	5380	7770	3.9	

4.16 Construction

This sector employed approximately 222,100 persons in 1981. Between 1971 and 1981, this sector has created 32,380 new jobs, or about 3.2 percent of total employment growth in Ontario. Since the annual employment growth rate of this sector (1.6 percent) is lower than the overall average (2.8 percent) for all industries, this sector's employment share has declined slightly from 6 percent in 1971 to 5.3 percent in 1981. The Construction industry remains as the fifth largest employer in Ontario.

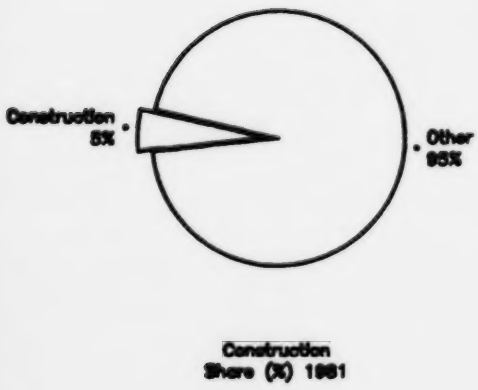
The three largest occupational groups in this sector are: Construction Trades occupations; Clerical occupations; and Managerial and Administrative occupations. In addition, Fabricating, Assembling and Repairing occupations and Farming occupations also have large employment growth over this period. Together, these five occupational groups account for about 85 percent of total employment in the industry.

4.16.1 Occupational Distribution Within the Industry

- As may be expected, Construction Trades occupations are most dominant in this industry. They alone account for almost two-thirds (63.3 percent) of total employment. Consequently, the employment concentration of other occupational groups in this industry is lower.

- In this sector, the employment concentration of males (90 percent) is also higher than that of the overall average (58.5 percent) for all industries.

FIGURE 54
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE CONSTRUCTION INDUSTRY, ONTARIO, 1981



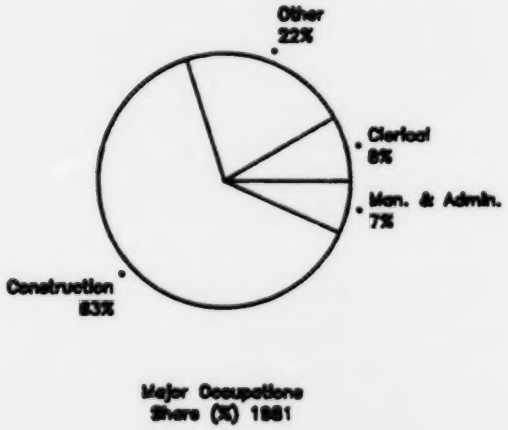
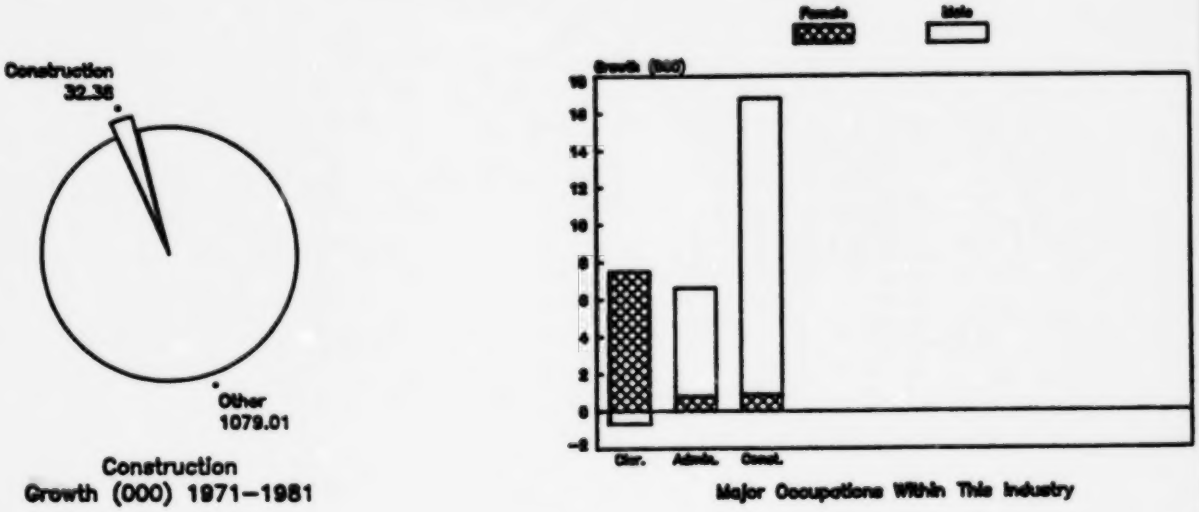


FIGURE 55
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE CONSTRUCTION INDUSTRY, ONTARIO, 1971 - 1981



4.16.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in this sector grew by 32,370, about 21,300 jobs for males and 11,100 for females.
- The Construction Trades occupations have made the largest contribution to employment growth; they alone contribute over half (52 percent) of all increases in employment over this period.
- Managerial and Administration occupations and Clerical occupations together contribute another 41.5 percent of total employment growth in this sector.
- In particular, Managerial and Administrative occupations have almost doubled in employment size over this period.

4.16.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (6.3 percent) over the 1971-1981 period, followed by Farming occupations (4.9 percent), Clerical occupations (4.7 percent), and Fabricating, Assembling and Repairing occupations (4.1 percent).

- With the exception of Construction Trades occupations, all major occupational groups have gained in employment share within the sector because of higher than average employment growth rates.

- In the aggregate, the Construction industry has lost in employment share among the 23 industry sectors in Ontario.

FIGURE 56
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE CONSTRUCTION INDUSTRY, ONTARIO, 1971 - 1981

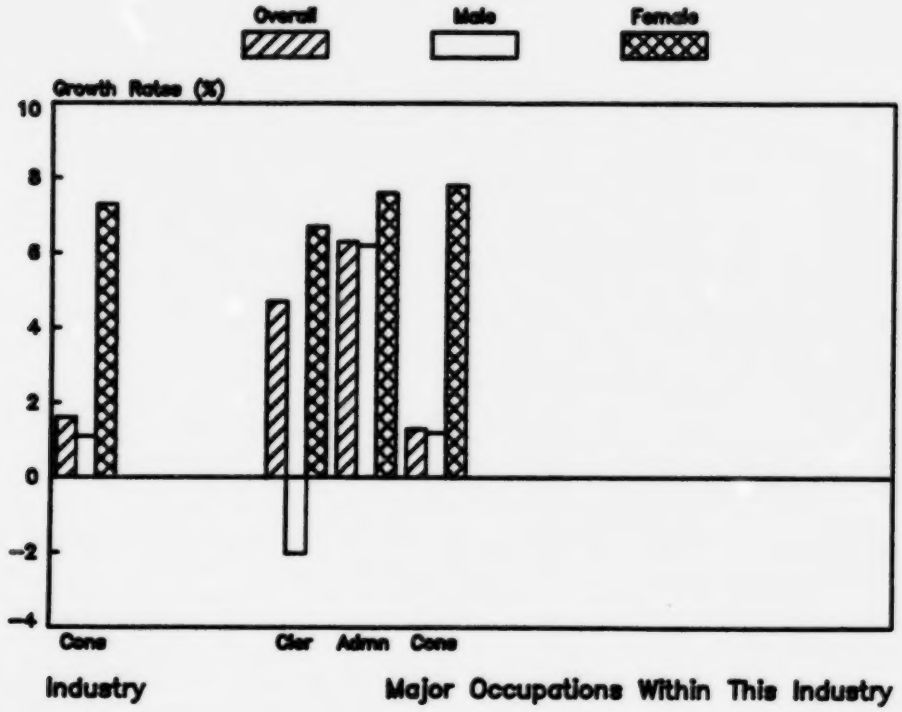


TABLE 24
SELECTED 4-DIGIT OCCUPATIONS IN THE CONSTRUCTION INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	1290	9.0	-665	-30	-695	-4.2	LOSS
1137	SALES MGMT OCCS	535	3.7	450	20	470	23.5	GAIN
1145	MGMT OCCS:CONSTR	6065	42.2	4185	140	4325	13.3	GAIN
1149	MGMT: NEC	1575	11.0	505	475	980	10.2	GAIN
1171	FINANCIAL OFFICERS	3180	22.1	1030	120	1150	4.6	LOSS
MAN. & ADMIN.	TOTAL	14365	100.0	5790	775	6565	6.3	
41	CLERICAL							
4111	SECRETARIES & STENO	3820	20.5	-30	1260	1230	4.0	LOSS
4131	BOOKKEEPERS	8515	45.8	-75	4145	4070	6.7	GAIN
4171	RECEPTIONISTS	980	5.3	25	570	595	9.8	GAIN
4190	SUPERV:CLERICAL:NEC	205	1.1	-480	-95	-575	-12.5	LOSS
4197	GEN OFF CLERKS	1880	10.1	-15	910	895	6.7	GAIN
CLERICAL	TOTAL	18600	100.0	-640	7515	6875	4.7	
71	FARMING							
7195	NURSERY WORKERS	6705	97.4	2275	500	2775	5.5	GAIN
FARMING	TOTAL	6885	100.0	2115	510	2625	4.9	
85	FABRICATING							
8533	ELEC EQUIP REPAIR:NEC	2335	27.6	1240	15	1255	8.0	GAIN
8541	CABINET MAKERS	475	5.6	210	10	220	6.4	GAIN
8580	SUPERV:MECHANICS	395	4.7	70	10	80	2.3	LOSS
8581	AUTO MECHANICS	460	5.4	-250	0	-250	-4.2	LOSS
8584	INDUST.FARM MECHANICS	2580	30.5	905	15	920	4.5	GAIN
FABRICATING	TOTAL	8460	100.0	2655	155	2810	4.1	
87	CONSTRUCTION							
8710	SUPERV:EXCAVATING	2530	1.8	-830	-10	-840	-2.8	LOSS
8711	EXCAVATING.GRADING	6715	4.8	1310	5	1315	2.2	GAIN
8713	PAVING.SURFACING	2035	1.4	935	30	965	6.6	GAIN
8718	LABOUR:EXCAVATING	1775	1.3	-1115	15	-1100	-4.7	LOSS
8733	CONSTR ELECTRICIANS	9725	6.9	475	50	525	0.6	LOSS
8780	SUPERV:OTHER CONSTR	22185	15.8	5015	165	5180	2.7	GAIN
8781	CARPENTERS	21835	15.5	940	85	1025	0.5	LOSS
8782	MASONS	7890	5.6	-135	25	-110	-0.1	LOSS
8785	PAINTERS	9775	7.0	725	240	965	1.0	LOSS
8786	INSULATING	1685	1.2	860	10	870	7.5	GAIN
8787	ROOFING	3770	2.7	1615	30	1645	5.9	GAIN
8791	PIPEFITTING.PLUMBING	8970	6.4	-375	-10	-385	-0.4	LOSS
8798	LABOUR:OTHER CONSTR	18745	13.3	-50	15	-35	-0.0	LOSS
8799	OTHER CONSTR:NEC	10130	7.2	4905	190	5095	7.2	GAIN
CONSTRUCTION	TOTAL	140595	100.0	15870	935	16805	1.3	

4.17 Electric Power and Gas Utilities

This industry sector employed 51,400 persons in 1981. Between 1971 and 1981, employment in this sector rose by 4.1 percent per year, which is considerably higher than the average of 2.8 percent for all industries. Consequently, its employment share has increased marginally from 1.1 percent in 1971 to 1.2 percent in 1981. This sector created almost 17,000 jobs during this period, accounting for 1.7 percent of the employment growth in Ontario. Approximately 1 in every 5 jobs created went to females.

The six occupational groups with the most employment in this sector are: Construction Trades occupations; Clerical occupations; Natural Science, Engineering and Mathematics occupations; Other Crafts and Equipment occupations; Managerial and Administrative occupations; and Fabricating, Assembling and Repairing occupations. Together, they account for about 81.3 percent of total employment in the industry.

4.17.1 Occupational Distribution Within the Industry

- When compared with the occupational distribution of all industries, three occupational groups show relatively higher employment concentration in this sector. They are: Construction Trades occupations; Natural Sciences, Engineering and Mathematics occupations; Other Crafts and Equipment Operating occupations.

- Males also have higher employment concentration in the following occupational groups: Natural Sciences, Engineering and Mathematics occupations; Clerical occupations; Other Crafts and Equipment Operating occupations; Managerial and Administrative occupations; and Fabricating, Assembling and Repairing occupations.

- For the whole industry, the employment proportion of male workers (83.3 percent) is substantially higher than the overall average for all industries (58.5 percent).

FIGURE 57
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO, 1981

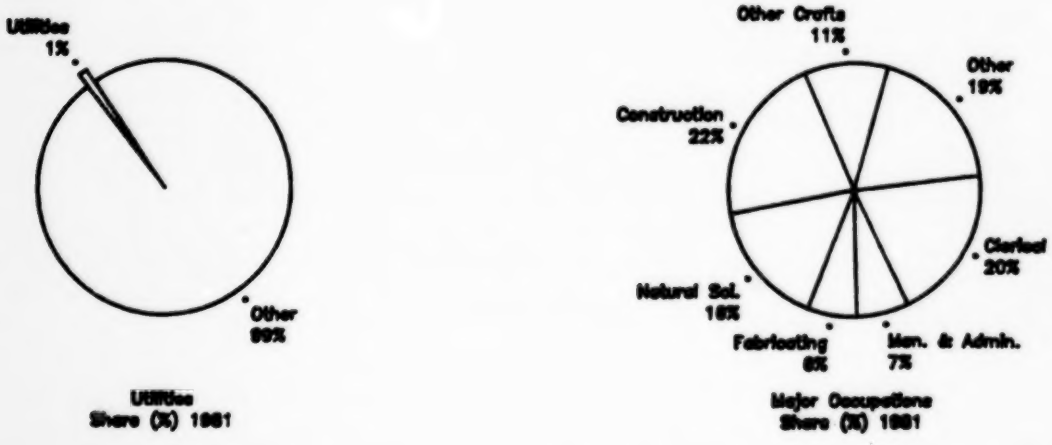
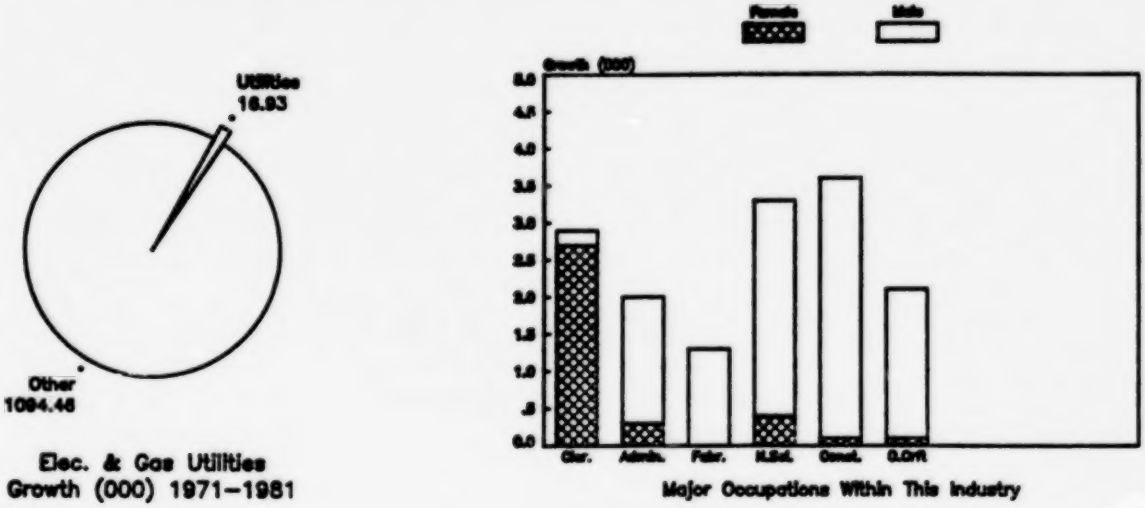


FIGURE 58
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO, 1971 - 1981



4.17.2 Occupational Employment Growth Within the Industry

- Employment in this sector increased by 16,930 over the 1971-1981 period, for which males accounted for almost 80 percent of the employment growth.

- Construction Trades occupations contribute most to the job gains (3,550), followed by Natural Sciences, Engineering and Mathematics occupations (3,260), and Clerical occupations (2,900).

- With the exception of Clerical occupations, males account for almost all of the employment growth over this period. In the case of Clerical occupations, females account for about 93 percent of the employment growth.

4.17.3 Occupational Employment Growth Rates Within the Industry

- Among the major occupational groups in this sector, Managerial and Administrative occupations have the highest employment growth rate (8.7 percent), followed by Natural Sciences, Engineering and Mathematics occupations (5.2 percent), Other Crafts and Equipment Operating occupations (4.9 percent), and Fabricating, Assembling and Repairing occupations (4.9 percent).

- With the exception of Fabricating, Assembling and Repairing occupations, females have much higher employment growth rates than their male counterparts.

- Due to higher than average employment growth rates, the following major occupational groups have gained in employment share within this sector: Natural Sciences, Engineering and Mathematics occupations, Other Crafts and Equipment Operating occupations; Managerial and Administrative occupations; and Fabricating, Assembling and Repairing occupations.

- Conversely, the following occupational groups have lost in employment share within this sector: Construction Trades occupations and Clerical occupations.

- On an overall basis, this sector has gained in employment share among the 23 industry sectors.

FIGURE 59
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO, 1971 - 1981

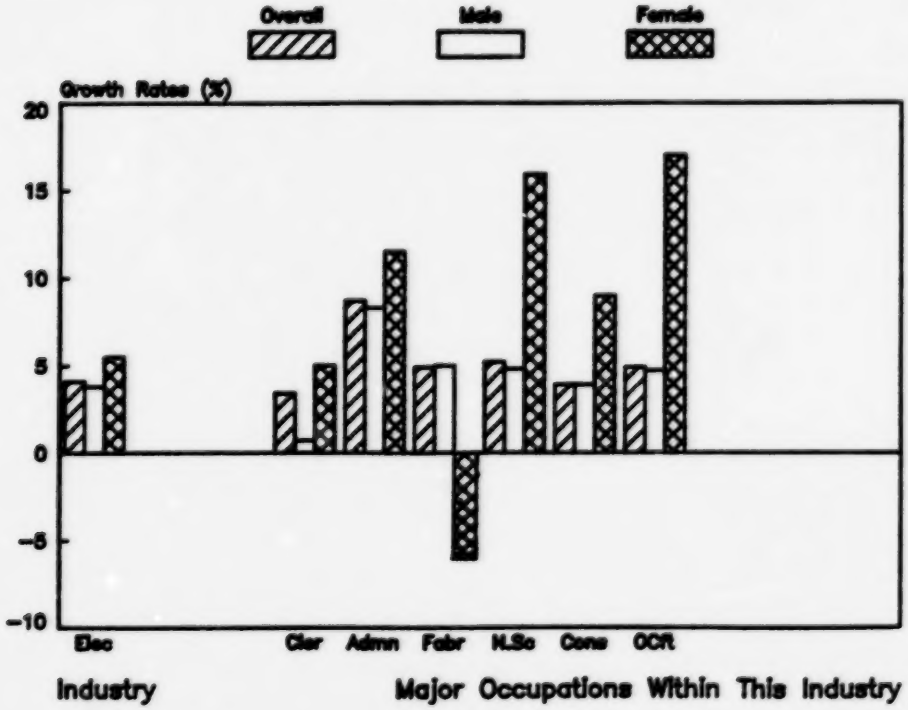


TABLE 25
SELECTED 4-DIGIT OCCUPATIONS IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	215	6.1	115	0	115	8.0	LOSS
1131	MANAGERS:NATURAL SCI	250	7.1	225	0	225	25.9	GAIN
1136	PERSONNEL MGMT OCCS	160	4.6	140	10	150	32.0	GAIN
1149	MGMT: NEC	895	25.6	615	55	670	14.8	GAIN
1171	FINANCIAL OFFICERS	620	17.7	240	45	285	6.3	LOSS
1174	PERSONNEL & REL OFF.	235	6.7	-15	30	15	0.7	LOSS
1175	PURCHASING OFFICERS	165	4.7	20	20	40	2.8	LOSS
1179	OCCS IN MGMT:NEC	280	8.0	-80	85	5	0.2	LOSS
MAN. & ADMIN.	TOTAL	3500	100.0	1700	275	1975	8.7	
21	NATURAL SCI.							
2143	CIVIL ENGINEERS	640	7.8	175	5	180	3.4	LOSS
2144	ELECTRICAL ENGINEERS	2245	27.5	1100	15	1115	7.1	GAIN
2147	MECHANICAL ENGINEERS	555	6.8	255	0	255	6.3	GAIN
2160	SUPERVISORS:ARCH. ENG	220	2.7	155	0	155	13.0	GAIN
2163	DRAUGHTING OCCUPATIONS	820	10.1	-10	60	50	0.6	LOSS
2165	ENGINEERING TECHN	1440	17.7	560	50	610	5.7	GAIN
2183	SYSTEMS ANALYSTS	620	7.6	125	125	250	5.3	GAIN
NATURAL SCI.	TOTAL	8155	100.0	2885	370	3255	5.2	
41	CLERICAL							
4111	SECRETARIES & STENO	1120	11.0	-5	330	325	3.5	GAIN
4113	TYPISTS & CLERK-TYP	680	6.7	-15	5	-10	-0.1	LOSS
4131	BOOKKEEPERS	2070	20.3	55	950	1005	6.9	GAIN
4143	EDP EQUIP OPERATORS	770	7.6	95	460	555	13.6	GAIN
4155	STOCK CLERKS	630	6.2	80	75	155	2.9	LOSS
4190	SUPERV:CLERICAL:NEC	320	3.1	-205	60	-145	-3.7	LOSS
4197	GEN OFF CLERKS	800	7.9	-45	80	35	0.4	LOSS
4199	OTHER CLERICAL:NEC	1425	14.0	95	170	265	2.1	LOSS
CLERICAL	TOTAL	10190	100.0	210	2685	2895	3.4	
85	FABRICATING							
8533	ELEC EQUIP REPAIR:NEC	585	17.8	240	0	240	5.4	GAIN
8580	SUPERV:MECHANICS	175	5.3	80	0	80	6.3	GAIN
8581	AUTO MECHANICS	345	10.5	85	0	85	2.9	LOSS
8584	INDUST.FARM MECHANICS	725	22.1	500	0	500	12.4	GAIN
8587	MATCH REPAIRERS	155	4.7	-85	0	-85	-4.3	LOSS
8589	OTHER MECHANICS:NEC	650	19.8	100	-5	95	1.6	LOSS
FABRICATING	TOTAL	3285	100.0	1265	-15	1250	4.9	
87	CONSTRUCTION							
8730	SUPERV:ELEC POWER	1360	12.3	305	-5	300	2.5	LOSS
8731	POWER LINEWORKERS	3460	31.2	1115	20	1135	4.1	GAIN
8733	CONSTR ELECTRICIANS	1120	10.1	290	0	290	3.0	LOSS
8780	SUPERV:OTHER CONSTR	420	3.8	235	5	240	8.8	GAIN
8791	PIPEFITTING.PLUMBING	1240	11.2	560	15	575	6.4	GAIN
CONSTRUCTION	TOTAL	11095	100.0	3495	55	3550	3.9	
95	OTHER CRAFTS							
9530	SUPERV:UTILITIES	1375	25.1	375	40	415	3.7	LOSS
9531	POWER STATION OP	2095	38.2	775	40	815	5.1	GAIN
9539	UTILITIES EQ OP:NEC	1955	35.6	855	0	855	5.9	GAIN
OTHER CRAFTS	TOTAL	5485	100.0	1990	95	2085	4.9	

4.18 Transportation and Storage

In 1981, this sector employed 162,900 persons in Ontario. Employment in this industry has increased by about 2.9 percent per year over the 1971-1981 period, which is marginally higher than the overall annual employment growth rate of 2.8 percent for all industries. Consequently, this sector's employment share has remained almost the same at 3.9 percent.

The six largest occupations in this sector are: Clerical occupations; Managerial and Administrative occupations; Fabricating, Assembling and Repairing occupations; Construction Trades occupations; Transport Equipment Operating occupations; and Material Handling occupations. Each of these major occupational groups has at least 5 percent of employment share in the sector, and together they account for approximately 88 percent of total employment.

4.18.1 Occupational Distribution Within the Industry

- As may be expected, Transport Equipment Operating occupations are highly concentrated in this sector. They alone account for about 46 percent of total employment.

- In contrast, Clerical occupations, Managerial and Administrative occupations, and Fabricating, Assembling and Repairing occupations have lower than average employment concentration in this industry.

- With the exception of Clerical occupations, male workers have dominated in all major occupational groups in this sector.

FIGURE 60
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO, 1981

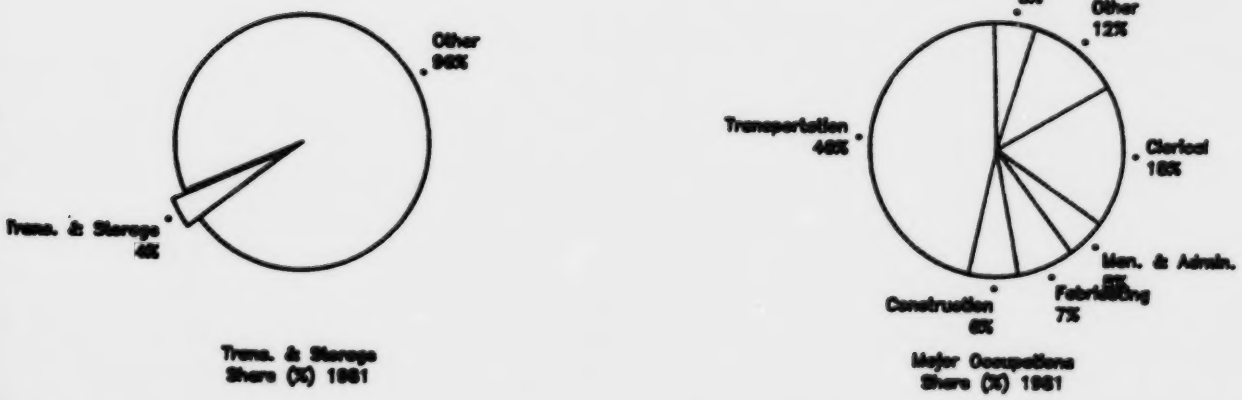
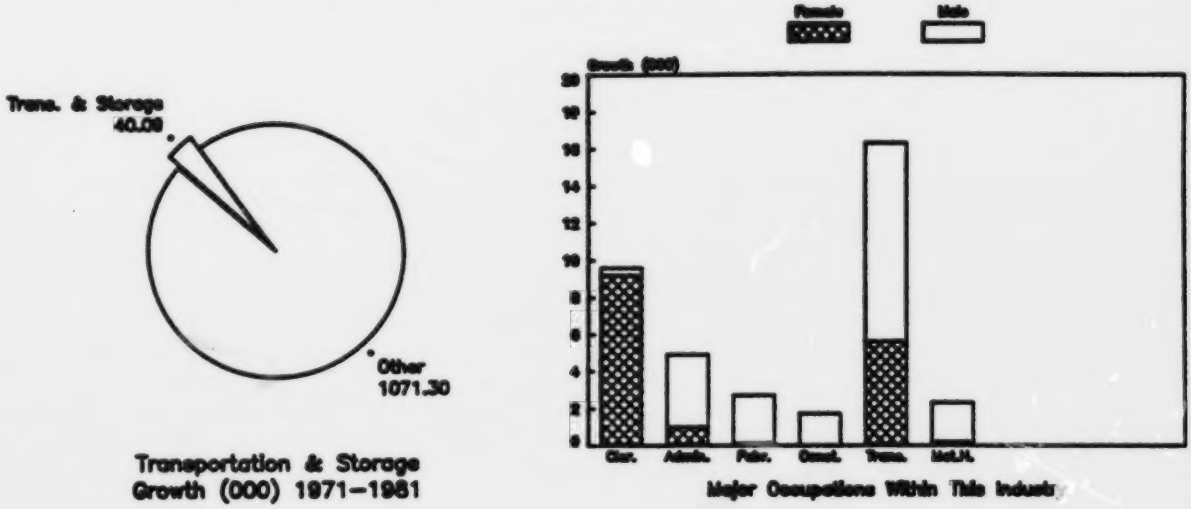


FIGURE 61
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO, 1971 - 1981



4.18.2 Occupational Employment Growth within the Industry

- This sector has created 40,080 new jobs between 1971 and 1981, about 21,900 for males and 18,200 for females.
- Transport Equipment Operating occupations has contributed most to employment growth to this sector (16,300), followed by Clerical occupations and Managerial and Administrative occupations (4,970).
- Employment growth for females is particularly prevalent in the Transport Equipment Operating occupations (5,600) and Clerical occupations (9,200).
- Managerial and Administrative occupations have more than doubled in size during this period.

4.18.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (9.9 percent) among the major occupational groups, followed by Clerical occupations (4.1 percent), and Material Handling occupations (3 percent).

- The annual employment growth rates for the other 3 major occupational groups are lower than the overall average (2.9 percent) for all occupations.

- The employment growth rates for females are much higher than those for males in each of the major occupational groups.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within this sector: Clerical occupations; Managerial and Administrative occupations; and Material Handling occupations.

- Conversely, the following occupational groups have lost in employment share: Fabricating, Assembling and Repairing occupations; Transport Equipment Operating occupations; and Construction Trades occupations.

- On balance, this sector has gained marginally in employment share among the 23 industry sectors.

FIGURE 62
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO, 1971 - 1981

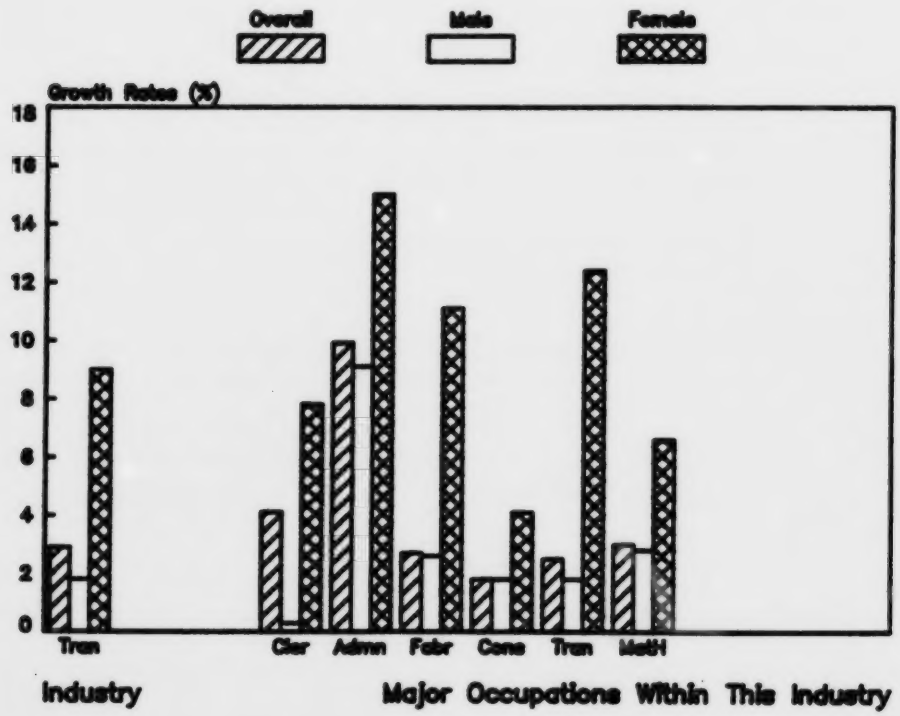


TABLE 26
SELECTED 4-DIGIT OCCUPATIONS IN THE TRANSPORTATION & STORAGE INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	680	8.4	110	0	110	1.8	LOSS
1137	SALES MGMT OCCS	625	7.7	460	80	540	22.1	GAIN
1143	PRODUCTION MGMT OCCS	390	4.8	320	30	350	25.6	GAIN
1147	MGMT OCCS:TRANSPORT	1965	24.2	1590	120	1710	22.7	GAIN
1149	MGMT: NEC	1310	16.1	695	340	1035	16.9	GAIN
1171	FINANCIAL OFFICERS	830	10.2	125	125	250	3.6	LOSS
1176	INSPECTORS:NON GOVT	445	5.5	140	0	140	3.8	LOSS
1179	OCCS IN MGMT:NEC	595	7.3	-60	155	95	1.8	LOSS
MAN. & ADMIN.	TOTAL	8120	100.0	3945	1020	4965	9.9	
41	CLERICAL							
4111	SECRETARIES & STENO	2440	8.3	-5	675	670	3.3	LOSS
4131	BOOKKEEPERS	5140	17.5	-55	2060	2005	5.1	GAIN
4143	EDP EQUIP OPERATORS	960	3.3	190	405	595	10.2	GAIN
4153	SHIPPING CLERKS	2415	8.2	-115	265	150	0.6	LOSS
4190	SUPERV:CLERICAL:NEC	1460	5.0	-105	330	225	1.7	LOSS
4193	TRAVEL CLERKS	8430	28.7	805	4330	5135	9.8	GAIN
4197	GEN OFF CLERKS	1600	5.5	-260	270	10	0.1	LOSS
CLERICAL	TOTAL	29325	100.0	380	9245	9625	4.1	
85	FABRICATING							
8533	ELEC EQUIP REPAIR:NEC	580	4.9	240	5	245	5.6	GAIN
8580	SUPERV:MECHANICS	1220	10.4	365	0	365	3.6	GAIN
8581	AUTO MECHANICS	4150	35.4	1125	20	1145	3.3	GAIN
8582	AIRCRAFT MECHANICS	1415	12.1	760	15	775	8.3	GAIN
8583	RAIL MECHANICS	2075	17.7	-40	20	-20	-0.1	LOSS
8584	INDUST.FARM MECHANICS	850	7.3	125	10	135	1.7	LOSS
FABRICATING	TOTAL	11720	100.0	2645	75	2720	2.7	
87	CONSTRUCTION							
8710	SUPERV:EXCAVATING	1320	12.8	70	-10	60	0.5	LOSS
8711	EXCAVATING.GRADING	1260	12.2	645	0	645	7.4	GAIN
8715	RAILWAY SECTIONMEN	3050	29.5	740	25	765	2.9	GAIN
8718	LABOUR:EXCAVATING	1085	10.5	115	0	115	1.1	LOSS
8733	CONSTR ELECTRICIANS	255	2.5	-360	0	-360	-8.4	LOSS
8780	SUPERV:OTHER CONSTR	400	3.9	110	5	115	3.4	GAIN
8796	INSPECTING:CONSTR	250	2.4	105	0	105	5.6	GAIN
8799	OTHER CONSTR:NEC	675	6.5	215	15	230	4.3	GAIN
CONSTRUCTION	TOTAL	10350	100.0	1670	25	1695	1.8	
91	TRANSPORTATION							
9111	AIR PILOT.ETC	2005	2.7	1170	10	1180	9.3	GAIN
9133	CONDUCTORS:RAILWAY	2840	3.8	-835	100	-735	-2.3	LOSS
9170	SUPERV:MOTOR TRANS	4785	6.4	1245	200	1445	3.7	GAIN
9171	BUS DRIVERS	15230	20.3	3215	3850	7065	6.4	GAIN
9173	TAXI DRIVERS	7470	10.0	585	420	1005	1.5	LOSS
9175	TRUCK DRIVERS	29675	39.5	4315	355	4670	1.7	LOSS
9179	MOTOR TRANS:NEC	2380	3.2	635	390	1025	5.8	GAIN
TRANSPORTATION	TOTAL	75070	100.0	10700	5600	16300	2.5	
93	MAT. HANDLING							
9310	SUPERV:MAT-HANDLING:NEC	1040	11.7	175	0	175	1.9	LOSS
9313	LONGSHORE WORKERS	4280	48.3	765	90	855	2.3	LOSS
9315	MAT-HANDLING EQ OP:NEC	1460	16.5	465	5	470	4.0	GAIN
9317	PACKAGING OCCS:NEC	500	5.6	110	115	225	6.2	GAIN
9318	LABOUR:MAT-HANDLING:NEC	1085	12.2	560	0	560	7.5	GAIN
MAT. HANDLING	TOTAL	8860	100.0	2055	185	2240	3.0	

4.19 Communication

In 1981, the Communications sector employed 83,100 persons in Ontario. Since this sector's annual employment growth rate (4.3 percent) is considerably higher than the overall average (2.8 percent) for all industries, the employment share of this sector has increased from 1.7 percent to 2.0 percent in 1981. The industry has created some 28,530 jobs in the last 10 years, or approximately 2.8 percent of total employment.

The five dominant occupations in this sector are: Clerical occupations; Managerial and Administrative occupations; Construction Trades occupations; Natural Sciences, Engineering and Mathematics occupations; and Artistic, Literary and Performing Arts occupations. These 5 occupational groups together account for approximately 79 percent of total employment in this industry.

4.19.1 Occupational Distribution Within the Industry

- Clerical occupations are particularly concentrated in this sector; they alone account for over half of total employment (51.8 percent) in 1981.
- The Clerical occupations and Artistic, Literary and Performing Arts occupations also show high employment concentration of female workers when compared with the overall average for all industries.
- In contrast, males have high employment concentration in the other 3 major occupational groups.

FIGURE 63
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE COMMUNICATION INDUSTRY, ONTARIO, 1981

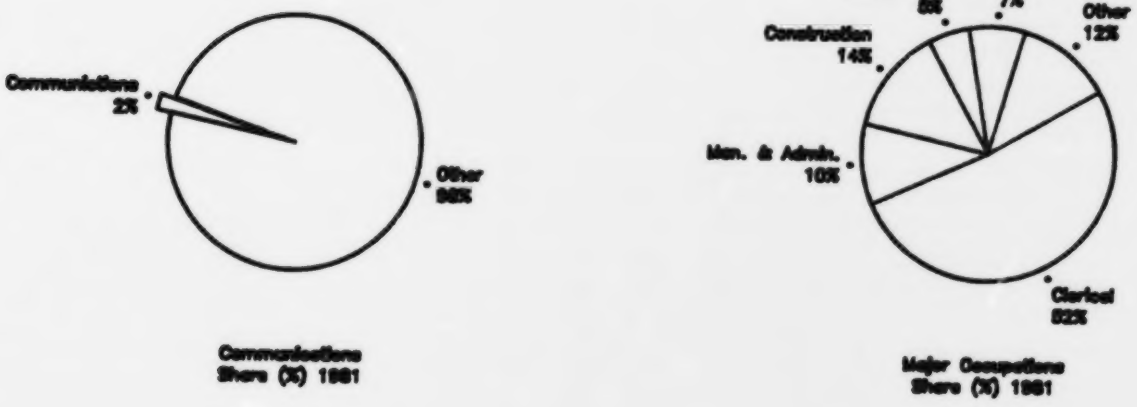
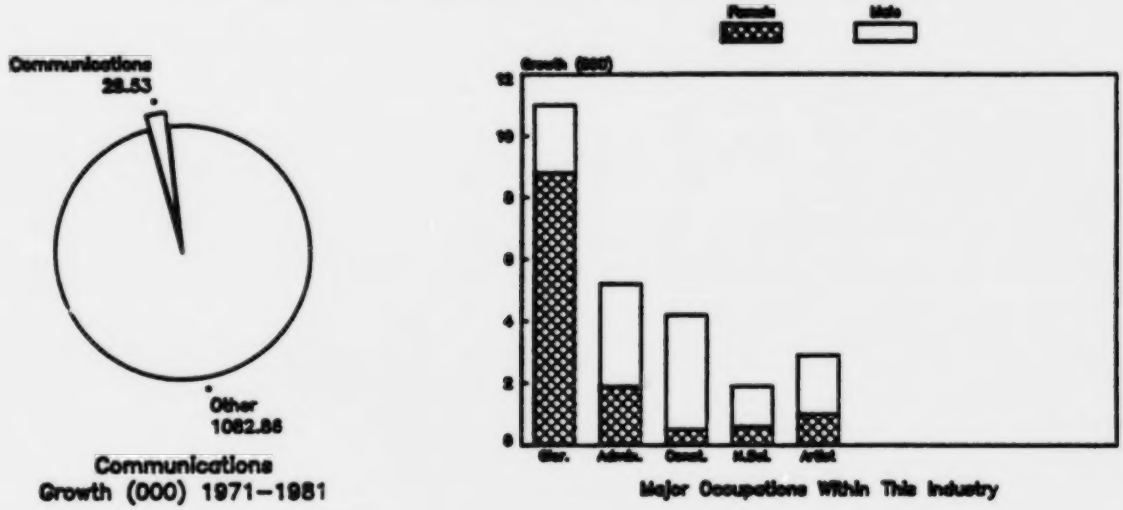


FIGURE 64
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE COMMUNICATION INDUSTRY, ONTARIO, 1971 - 1981



4.19.2 Occupational Employment Growth Within the Industry

- Total employment in this sector increased by 28,530 during the 1971-1981 period; the job gains are evenly shared between males and females.
- Clerical occupations are the largest contributor to employment growth (11,040), followed by Managerial and Administrative occupations; and Construction Trades occupations (4,160).
- With the exception of Clerical occupations, males account most of the new jobs created over this period.
- As a result of high employment growth, the employment size of Managerial and Administrative occupations have more than doubled in size, and Artistic, Literary and Performing Arts occupations have almost doubled in size over this period.

4.19.3 Occupational Employment Growth Rates Within the Industry

- Among the major occupational groups, Managerial and Administrative occupations have the highest annual employment growth rate (10 percent), compared with the overall industry average of 4.3 percent per year for all occupations.

- Clerical occupations are the only major occupational group that has below average industry employment growth rate.

- With the exception of Clerical occupations, all major occupational groups have gained in employment share within the sector.

- The industry as a whole has also gained in employment share among the 23 industry sectors.

FIGURE 65
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE COMMUNICATION INDUSTRY, ONTARIO, 1971 - 1981

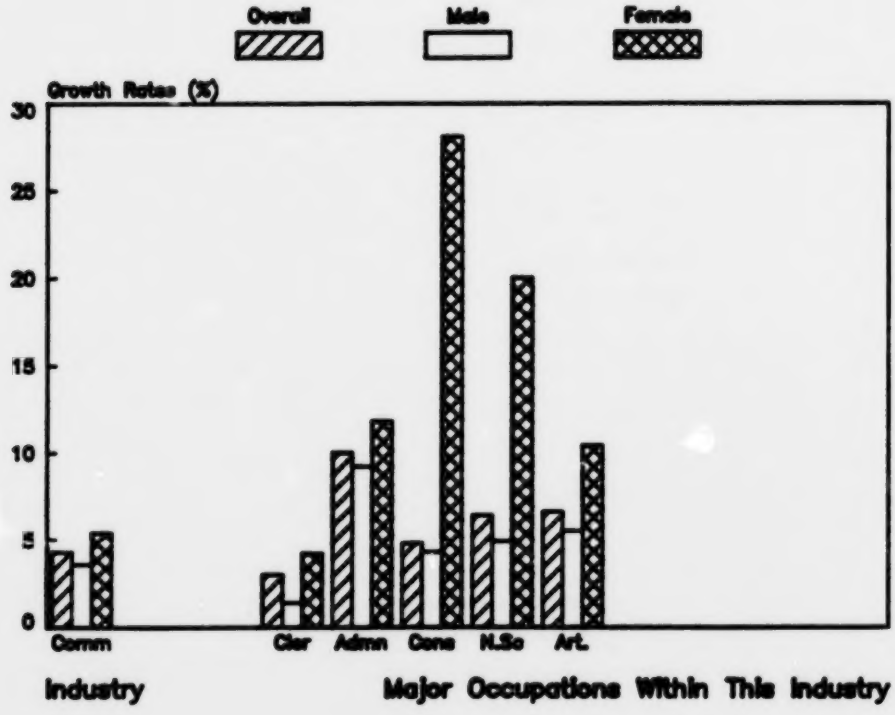


TABLE 27
SELECTED 4-DIGIT OCCUPATIONS IN THE COMMUNICATION INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1115	POSTMASTERS	1115	13.2	15	-40	-25	-0.2	LOSS
1130	GENERAL MANAGERS	385	4.6	180	35	215	8.5	LOSS
1131	MANAGERS:NATURAL SCI	295	3.5	235	40	275	30.9	GAIN
1136	PERSONNEL MGMT OCCS	335	4.0	170	145	315	32.6	GAIN
1137	SALES MGMT OCCS	530	6.3	325	105	430	18.1	GAIN
1143	PRODUCTION MGMT OCCS	315	3.7	205	75	280	24.6	GAIN
1147	MGMT OCCS:TRANSPORT	1920	22.8	1310	465	1775	29.5	GAIN
1149	MGMT: NEC	1090	12.9	505	475	980	25.8	GAIN
1171	FINANCIAL OFFICERS	925	11.0	280	225	505	8.2	LOSS
1179	OCCS IN MGMT:NEC	670	8.0	-160	155	-5	-0.1	LOSS
MAN. & ADMIN.	TOTAL	8425	100.0	3275	1915	5190	10.0	
21	NATURAL SCI.							
2144	ELECTRICAL ENGINEERS	1520	36.0	380	145	525	4.3	LOSS
2145	INDUSTRIAL ENGINEERS	410	9.7	195	100	295	13.6	GAIN
2163	DRAUGHTING OCCUPATIONS	255	6.0	5	150	155	9.8	GAIN
2165	ENGINEERING TECHN	655	15.5	20	55	75	1.2	LOSS
2183	SYSTEMS ANALYSTS	855	20.3	480	155	635	14.5	GAIN
NATURAL SCI.	TOTAL	4220	100.0	1300	650	1950	6.4	
33	ARTIST							
3315	PHOTO & CAMERA OPERATORS	300	5.0	100	15	115	5.0	LOSS
3330	PROD:PERFOM ARTS	1735	28.6	460	360	820	6.6	GAIN
3337	RADIO & TV ANNOUNCER	1740	28.7	760	195	955	8.3	GAIN
3352	WRITERS & ED:PUB	1495	24.7	425	265	690	6.4	LOSS
ARTIST	TOTAL	6060	100.0	1890	960	2850	6.6	
41	CLERICAL							
4111	SECRETARIES & STENO	1625	3.8	10	580	590	4.6	GAIN
4131	BOOKKEEPERS	2925	6.8	170	1470	1640	8.6	GAIN
4143	EDP EQUIP OPERATORS	1145	2.7	225	705	930	18.2	GAIN
4170	SUPERV:RECEPT MAIL DISTR	2275	5.3	30	-30	0	0.0	LOSS
4172	MAIL CARRIERS	8810	20.5	1395	915	2310	3.1	GAIN
4173	MAIL & POSTAL CLERKS	11185	26.0	285	2835	3120	3.3	GAIN
4175	TELEPHONE OPERATORS	3860	9.0	85	-690	-605	-1.4	LOSS
4197	GEN OFF CLERKS	2115	4.9	-20	535	515	2.8	LOSS
4199	OTHER CLERICAL:NEC	2710	6.3	15	620	635	2.7	LOSS
CLERICAL	TOTAL	43020	100.0	2200	8845	11045	3.0	
87	CONSTRUCTION							
8730	SUPERV:ELEC POWER	1235	11.0	245	45	290	2.7	LOSS
8731	POWER LINEWORKERS	260	2.3	185	5	190	14.0	GAIN
8735	WIRE COMMUNICATIONS	8120	72.5	3215	400	3615	6.1	GAIN
8739	ELECTRICAL POWER:NEC	715	6.4	-195	-5	-200	-2.4	LOSS
CONSTRUCTION	TOTAL	11200	100.0	3670	490	4160	4.8	

4.20 Trade

There were approximately 682,100 persons employed in this sector in 1981. This sector remains the second largest employer in the Province, although its employment share has increased slightly from 14.8 percent in 1971 to 16.3 percent in 1981. The gain in employment share is the result of a higher annual employment growth rate of 3.8 percent, compared with 2.8 percent for all industries over the same period. Between 1971 and 1981, the sector has created 214,470 new jobs, accounting for about 21.3 percent of total employment growth in Ontario.

Four occupational groups are dominant in this sector: Clerical occupations; Managerial and Administrative occupations; Sales occupations; and Fabricating, Assembling and Repairing occupations. These occupations together account for about 82 percent of total employment in the industry.

4.20.1 Occupational Distribution Within the Industry

- Sales occupations are highly concentrated in this industry; they alone account for 40 percent of total employment. Clerical occupations account for another one-quarter of employment in this sector.

- With the exception of Managerial and Administrative occupations, all major occupational groups have higher than average employment concentration.

- In this sector, Fabricating, Assembly and Repairing occupations have very high employment concentration of males (90 percent), compared with the overall average (58.5 percent) for all industries.

FIGURE 66
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE TRADE INDUSTRY, ONTARIO, 1981

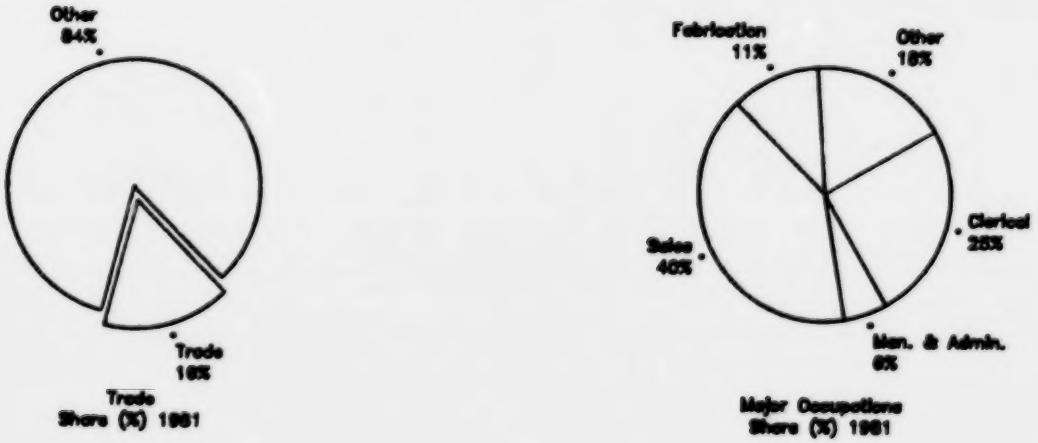
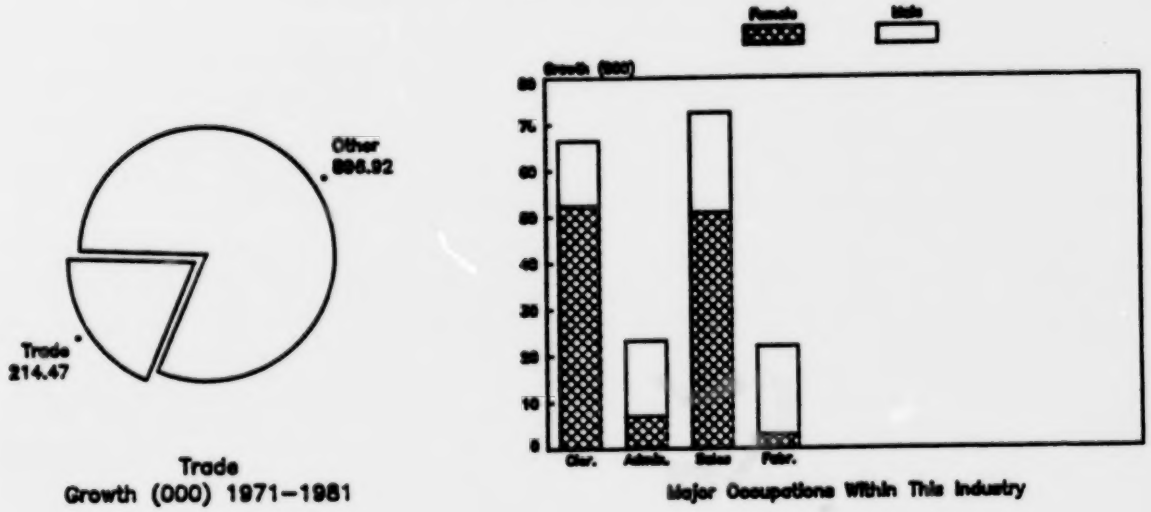


FIGURE 67
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE TRADE INDUSTRY, ONTARIO, 1971 - 1981



4.20.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, employment in the Trade sector grew by approximately 214,500, about 89,400 jobs for males and 125,100 jobs for females.

- The 2 leading contributors to employment growth are Sales occupations (72,450) and Clerical occupations (66,350), followed by Managerial and Administrative occupations (23,200), and Fabricating, Assembling and Repairing occupations (21,950).

- While females account for most of the new jobs in Sales occupations and Clerical occupations, males account for the majority of job gains in Fabricating, Assembling and Repairing occupations and Managerial and Administrative occupations.

- Managerial and Administrative occupations have more than doubled in size over this period.

4.20.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (9.5 percent) among the major occupational groups, followed by Clerical occupations (5.1 percent).

- Employment growth rates for females are also much higher than those for males in each of the major occupational groups.

- Although Sales occupations are the leading contributor in employment growth, their annual employment growth rate (3.1 percent) is much lower than the overall industry average (3.8 percent) for all occupations.

- As a result of higher than average employment growth rates, Clerical occupations and Managerial and Administrative occupations have gained in employment share within the sector.

- Conversely, Sales occupations and Fabricating, Assembling and Repairing occupations have lost in employment share within the sector.

- In the aggregate, the sector has lost in employment share among the 23 industry sectors.

FIGURE 68
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE TRADE INDUSTRY, ONTARIO, 1971 - 1981

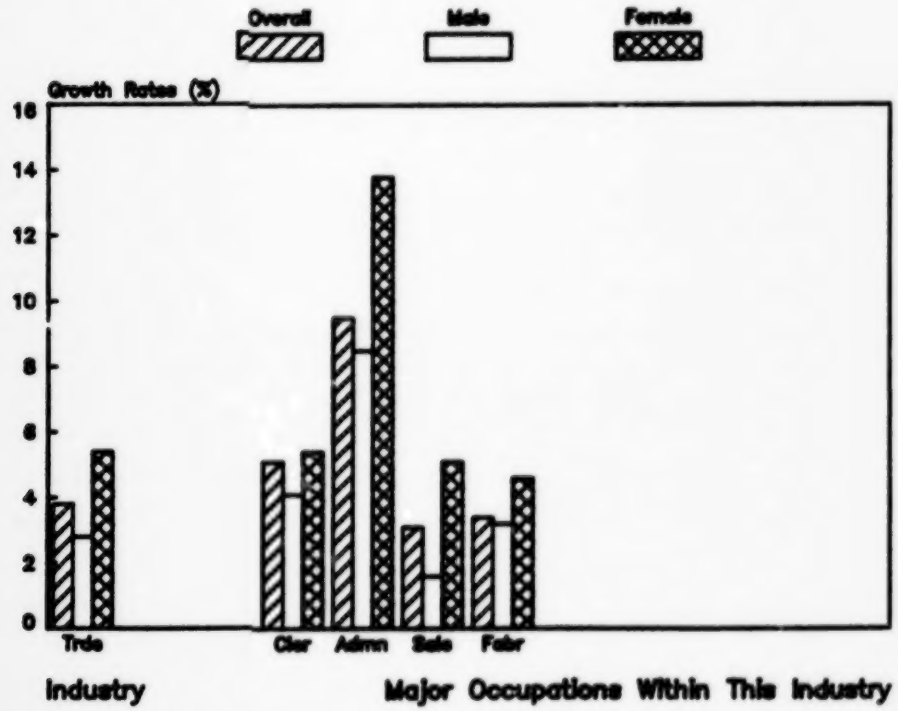


TABLE 28
SELECTED 4-DIGIT OCCUPATIONS IN THE TRADE INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	4070	10.5	-335	5	-330	-0.8	LOSS
1135	MGRS: FINANCIAL	1315	3.4	730	320	1050	17.4	GAIN
1137	SALES MGMT OCCS	13805	35.6	9470	2605	12075	23.1	GAIN
1143	PRODUCTION MGMT OCCS	1970	5.1	1435	195	1630	19.2	GAIN
1149	MGMT: NEC	6645	17.1	3255	2045	5300	17.3	GAIN
1171	FINANCIAL OFFICERS	4870	12.6	790	780	1570	4.0	LOSS
1179	OCCS IN MGMT:NEC	2080	5.4	-765	435	-330	-1.5	LOSS
MAN. & ADMIN.	TOTAL	38800	100.0	16245	6960	23205	9.5	
41	CLERICAL							
4111	SECRETARIES & STENO	12085	7.1	-75	3815	3740	3.8	LOSS
4131	BOOKKEEPERS	35700	21.0	890	13965	14855	5.5	GAIN
4133	CASHIERS & TELLERS	45525	26.8	1585	19740	21325	6.5	GAIN
4143	EDP EQUIP OPERATORS	4690	2.8	425	2830	3255	12.6	GAIN
4153	SHIPPING CLERKS	13685	8.1	4165	1390	5555	5.3	GAIN
4155	STOCK CLERKS	17525	10.3	7015	2365	9380	8.0	GAIN
4197	GEN OFF CLERKS	8980	5.3	-125	2590	2465	3.3	LOSS
CLERICAL	TOTAL	169935	100.0	14010	52375	66385	5.1	
51	SALES							
5130	SUPERV:SALES.COM	84435	30.7	-190	12625	12435	1.6	LOSS
5133	COMMERCIAL TRAVELLER	17550	6.4	7710	1720	9430	8.0	GAIN
5135	SALESPERSONS COM:NEC	144045	52.4	11585	31415	43000	3.6	GAIN
SALES	TOTAL	274785	100.0	21535	50915	72450	3.1	
85	FABRICATING							
8580	SUPERV:MECHANICS	8180	10.5	2460	80	2540	3.8	GAIN
8581	AUTO MECHANICS	34500	44.4	7210	140	7350	2.4	LOSS
8584	INDUST.FARM MECHANICS	4305	5.5	2190	-10	2180	7.3	GAIN
8595	PAINTING. DECORATING	2845	3.7	1580	105	1685	9.4	GAIN
FABRICATING	TOTAL	77700	100.0	19070	2880	21950	3.4	

4.21 Finance, Insurance and Real Estate

In 1981, this industry employed 245,800 persons, approximately 5.9 percent of total employment in Ontario. Since this sector's annual employment growth rate (5.1 percent) is substantially higher than the overall annual employment growth rate (2.8 percent) for all industries, the employment share of this sector has increased from 4.7 percent in 1971 to 5.9 percent in 1981. Between 1971 and 1981, this sector has created 96,670 new jobs, accounting for about 9.6 percent of total employment growth in Ontario.

The four occupational groups with the most employment in this sector are: Clerical occupations; Managerial and Administrative occupations; Service occupations; and Sales occupations. In addition, Natural Sciences, Engineering and Mathematics occupations also have significant employment growth over this period. These 5 occupational groups together account for about 96 percent of total employment in the sector.

4.21.1 Occupational Distribution Within the Industry

- High employment concentration is particularly prevalent for Clerical occupations; Managerial and Administrative occupations; and Sales occupations. They together account for about 88.5 percent of total employment in the sector.

- In contrast, the employment concentration of Service occupations and Natural Sciences, Engineering and Mathematics occupation in this sector is well below the overall average for all industries.

- When compared with the overall average for all industries, employment concentration for females is also particularly prevalent in Clerical occupations; Managerial and Administrative occupations; and Natural Sciences, Engineering and Mathematics occupations. Males, on the other hand, exhibit a higher than overall average employment concentration in Sales occupations and Service occupations.

FIGURE 69
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO, 1981

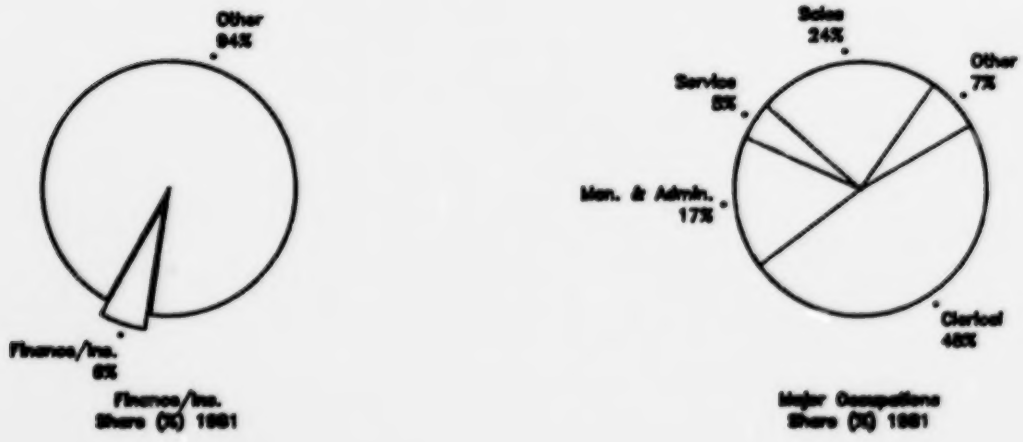
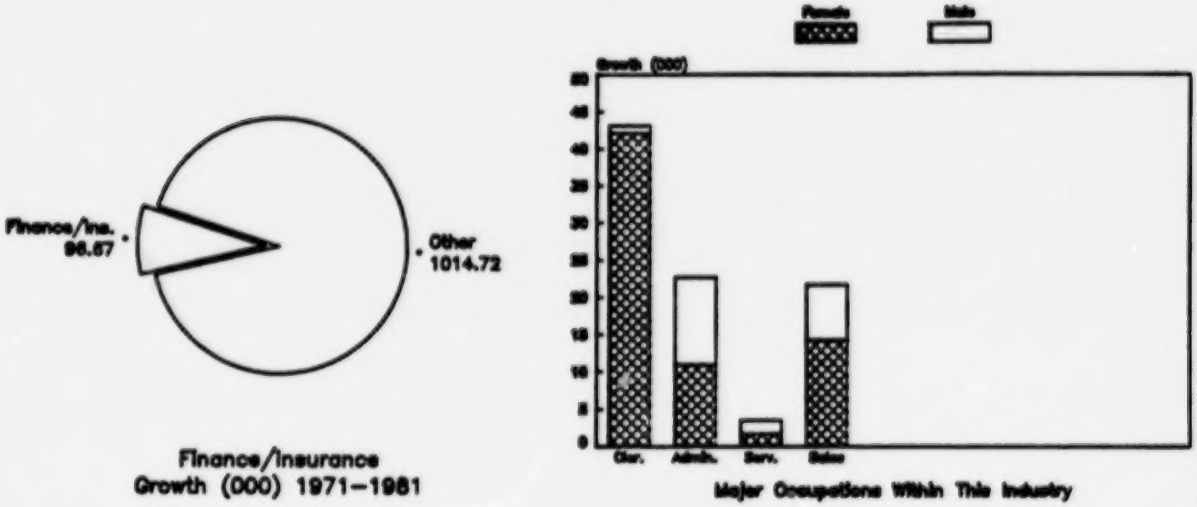


FIGURE 78
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO, 1971 - 1981



4.21.2 Occupational Employment Growth Within the Industry

- Employment of this sector rose by about 96,670 over the 1971-1981 period, 24,900 for males and 71,800 for females.

- Clerical occupations are the largest contributor to employment growth (44,600), followed by Managerial and Administrative occupations (23,500), and Sales occupations (22,400).

- Managerial and Administrative occupations and Natural Sciences, Engineering and Mathematics occupations have more than doubled in size over this period.

4.21.3 Occupational Employment Growth Rates Within the Industry

- Natural Sciences, Engineering and Mathematics occupations have the highest annual employment growth rate (9.3 percent), followed by Managerial and Administrative occupations (8.2 percent).

- The annual employment growth rates for the other 3 major occupational groups are well below the industry average of 5.1 percent per year.

- The annual employment growth rates for females, however, are higher than those for males in all major occupational groups.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within this sector: Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations.

- Conversely, the following occupational groups have lost in employment share within the sector: Clerical occupations; Service occupations; and Sales occupations.

- On balance, this industry sector has gained in employment share among the 23 industry sectors.

FIGURE 71
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO, 1971 - 1981

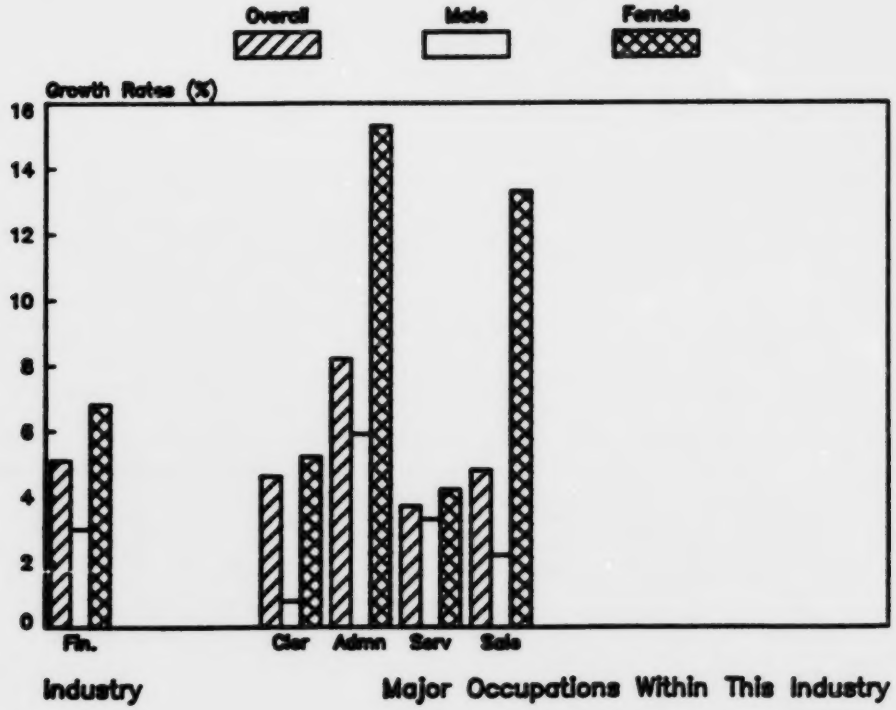


TABLE 29
SELECTED 4-DIGIT OCCUPATIONS IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	2365	5.7	-90	50	-40	-0.2	LOSS
1135	MGRS: FINANCIAL	14965	36.1	9730	3525	13255	24.2	GAIN
1137	SALES MGMT OCCS	1765	4.3	1160	155	1315	14.6	GAIN
1149	MGMT: NEC	3785	9.1	1620	1105	2725	13.6	GAIN
1171	FINANCIAL OFFICERS	12855	31.0	-1520	4025	2505	2.2	LOSS
1179	OCCS IN MGMT:NEC	2050	4.9	-390	1010	620	3.7	LOSS
MAN. & ADMIN.	TOTAL	41445	100.0	11715	10955	22670	8.2	
21	NATURAL SCI.							
2145	INDUSTRIAL ENGINEERS	580	8.3	205	205	410	13.1	GAIN
2181	MATH. STAT.ACTUARIES	670	9.6	190	135	325	6.9	LOSS
2183	SYSTEMS ANALYSTS	4910	70.3	1990	1230	3220	11.3	GAIN
NATURAL SCI.	TOTAL	6980	100.0	2365	1740	4105	9.3	
41	CLERICAL							
4111	SECRETARIES & STENO	17620	14.9	-120	5895	5775	4.1	LOSS
4113	TYPISTS & CLERK-TYP	7990	6.8	55	185	240	0.3	LOSS
4130	SUPERV:BOOKKEEPING	4745	4.0	140	2870	3010	10.6	GAIN
4131	BOOKKEEPERS	18765	15.9	5	7620	7625	5.4	GAIN
4133	CASHIERS & TELLERS	22580	19.1	410	9705	10115	6.1	GAIN
4135	FINANCE CLERKS	16450	13.9	310	8000	8310	7.3	GAIN
4143	EDP EQUIP OPERATORS	6025	5.1	725	3045	3770	10.3	GAIN
CLERICAL	TOTAL	118240	100.0	985	42125	43110	4.6	
51	SALES							
5170	SUPERV:SALES.SERV	8025	13.9	-640	1070	430	0.6	LOSS
5171	INSURANCE SALES	19960	34.6	1295	5445	6740	4.2	LOSS
5172	REAL ESTATE SALES	23335	40.5	6395	6660	13055	8.5	GAIN
5173	SALES:SECURITIES	5025	8.7	905	895	1800	4.5	LOSS
SALES	TOTAL	57675	100.0	7420	14255	21675	4.8	
61	SERVICE							
6115	GUARDS & OTH.SEC	750	6.6	335	85	420	8.6	GAIN
6130	SUPERV:ACCOMMODATION	4070	36.0	1570	1245	2815	12.5	GAIN
6190	SUPERV:OTHER SERV	565	5.0	175	120	295	7.7	GAIN
6191	JANITORS	5000	44.2	-320	130	-190	-0.4	LOSS
SERVICE	TOTAL	11320	100.0	1775	1685	3460	3.7	

4.22 Communities, Business and Personal Services

In 1981, this sector employed 1,165,600 persons. Since this sector's annual employment growth rate (4.5 percent) is higher than the overall annual employment growth (2.8 percent) for all industries, the employment share of this sector has increased from 23.6 percent to almost 28 percent in 1981. Between 1971 and 1981, the industry has created 418,350 new jobs in Ontario, accounting for 42 percent of the increases in employment over this period. The sector remains to be the largest employer in the province.

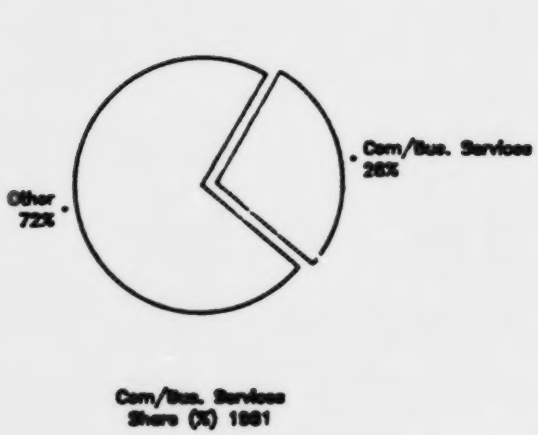
The five largest occupational groups in this sector are: Clerical occupations; Managerial and Administrative occupations; Services occupations; Medical and Health occupations; and Teaching occupations. In addition, 3 occupational groups also have significant contribution to employment growth during this period. They are: Social Sciences occupations; Natural Sciences, Engineering and Mathematics occupations; and Artistic, Literary and Performing Arts occupations. Together, these 8 occupational groups account for about 90 percent of total employment in this sector.

4.22.1 Occupational Distribution Within the Industry

- Services occupations, Teaching occupations, and Medical and Health occupations are highly represented in this sector. These 3 occupational groups together account for more than half (56.3 percent) of total employment.

- When compared with the overall occupational distribution for all industries, high employment concentration for females is particularly prevalent in the following occupational groups: Social Sciences occupations; Medical and Health occupations; Clerical occupations; Service occupations; and Teaching occupations. In the aggregate, 60 percent of employed workers in this sector are females.

FIGURE 72
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE COMMUNITIES, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO, 1981



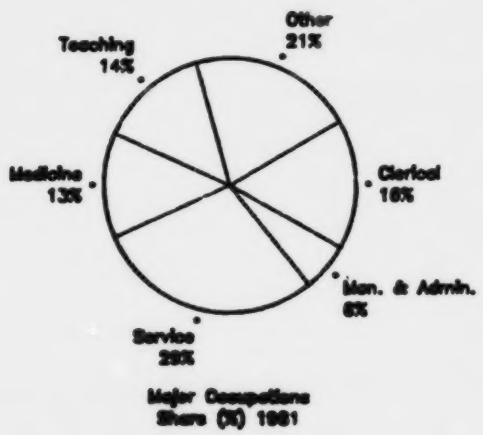
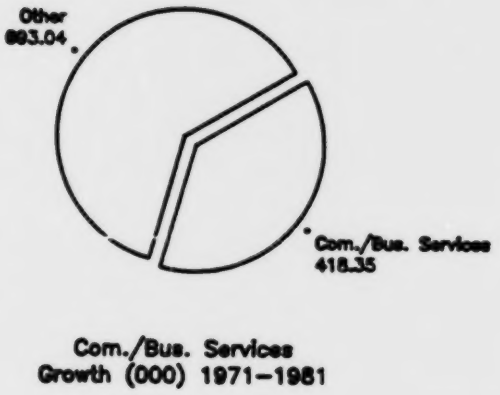
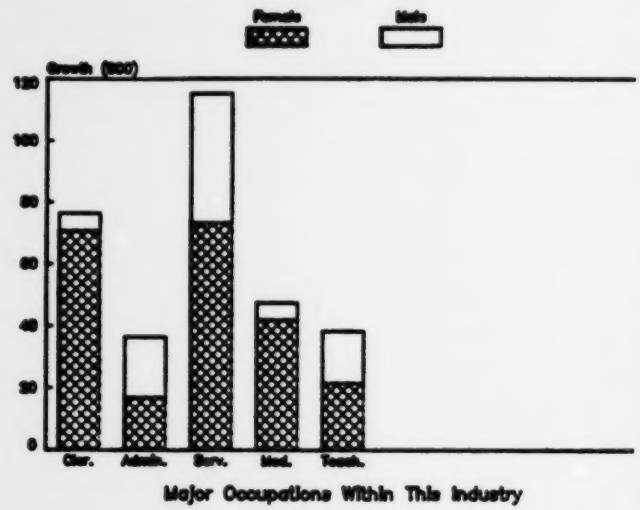


FIGURE 73
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE COMMUNITIES, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO, 1971 - 1981



Com./Bus. Services
Growth (000) 1971–1981



Major Occupations Within This Industry

4.22.2 Occupational Employment Growth Within the Industry

- Between 1971 and 1981, total employment in the sector increased by 418,350, about 149,400 for males and 269,000 for females.

- Service occupations are the largest contributor to employment growth (115,280), followed by Clerical occupations (76,490), Medical and Health occupations (47,390), and Teaching occupations (38,210).

- Employment growth was also significant for Social Science occupations (22,450), Natural Science, Engineering and Mathematics occupations (22,390), and Artistic, Literary and Performing Arts occupations (15,570). Employment for each of these 3 occupational groups doubled in size over the 1971-1981 period.

4.22.3 Occupational Employment Growth Rates Within the Industry

- Managerial and Administrative occupations have the highest annual employment growth rate (7 percent), followed by Clerical occupations (5.3 percent).

- Although their employment shares are not significant in this sector, Artistic, Literary, and Performing Arts occupations and Natural Sciences, Engineering and Mathematics occupations both have very high employment growth rates (9 percent).

- With the exception of Teaching occupations, annual employment growth rates for females are much higher than those for males.

- Due to higher than average annual employment growth rates, the following occupations have gained in employment share within this sector: Clerical occupations; Managerial and Administrative occupations; Social Science occupations; Natural Science, Engineering and Mathematics occupations; and Artistic, Literary and Performing Arts occupations.

- Conversely, the following occupations have lost in employment share within this sector: Service occupations; Medical and Health occupations; and Teaching occupations.

- However, on an overall basis, the industry has gained in employment share among the 23 industry sectors.

FIGURE 74
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE COMMUNITIES, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO, 1971 - 1981

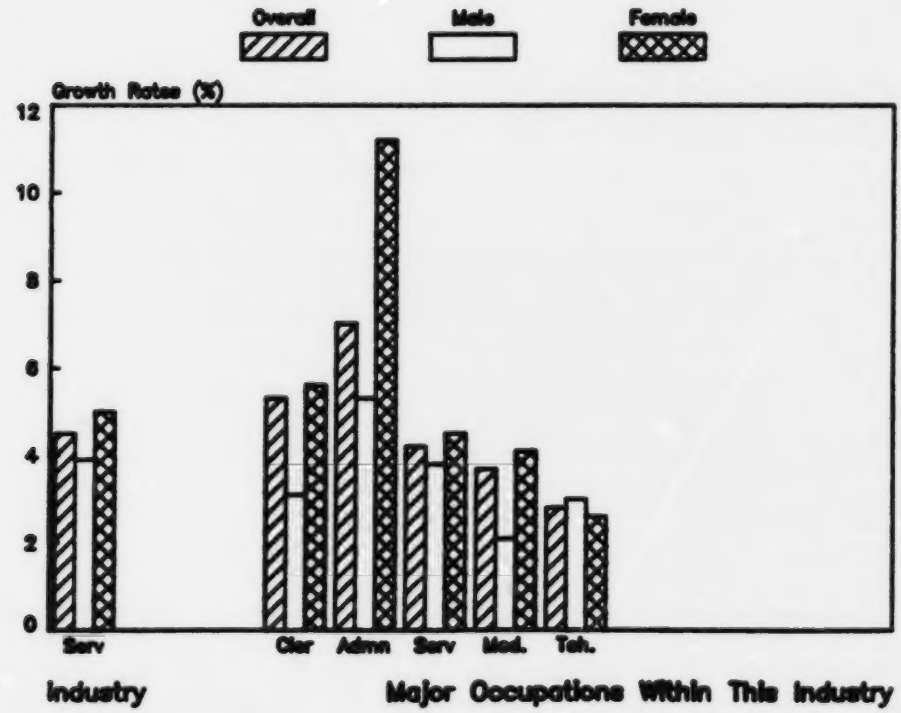


TABLE 30
SELECTED 4-DIGIT OCCUPATIONS IN THE COMMUNITIES, BUSINESS & PERSONAL SERVICES INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1130	GENERAL MANAGERS	3765	5.1	415	305	720	2.1	LOSS
1133	ADMINS TEACHING	10645	14.4	640	1060	1700	1.8	LOSS
1134	ADMINS MEDICINE	3765	5.1	815	1260	2075	8.3	GAIN
1137	SALES MGMT OCCS	3540	4.8	2230	835	3065	22.2	GAIN
1142	SERVICES MGMT OCCS	3330	4.5	2090	735	2825	20.8	GAIN
1149	MGMT: NEC	8545	11.6	2815	3195	6010	12.9	GAIN
1171	FINANCIAL OFFICERS	17040	23.1	4480	3030	7510	6.0	LOSS
1174	PERSONNEL & REL OFF.	3400	4.6	225	1160	1385	5.4	LOSS
1179	OCCS IN MGMT:NEC	8970	12.1	650	2865	3515	5.1	LOSS
MAN. & ADMIN.	TOTAL	73895	100.0	19420	17025	36445	7.0	
21	NATURAL SCI.							
2143	CIVIL ENGINEERS	4090	9.0	1470	95	1565	4.9	LOSS
2144	ELECTRICAL ENGINEERS	2770	6.1	1680	90	1770	10.7	GAIN
2145	INDUSTRIAL ENGINEERS	2715	6.0	1670	335	2005	14.4	GAIN
2147	MECHANICAL ENGINEERS	2455	5.4	1405	60	1465	9.5	GAIN
2159	PROFESSIONAL ENG: NEC	1920	4.2	1300	215	1515	16.8	GAIN
2160	SUPERVISORS:ARCH. ENG	1655	3.7	1060	150	1210	14.0	GAIN
2163	DRAUGHTING OCCUPATIONS	5940	13.1	1690	765	2455	5.5	LOSS
2165	ENGINEERING TECHN	3425	7.6	1580	230	1810	7.8	GAIN
2183	SYSTEMS ANALYSTS	9035	20.0	4885	1755	6640	14.2	GAIN
NATURAL SCI.	TOTAL	45220	100.0	18180	4210	22390	7.1	
23	SOCIAL SCI.							
2315	PSYCHOLOGISTS	2960	5.8	500	755	1255	5.7	LOSS
2331	SOCIAL WORKERS	8085	15.8	1225	3690	4915	9.8	GAIN
2333	HELF COMN SERV OCCS	10840	21.2	1035	5935	6970	10.8	GAIN
2339	SOCIAL WORK OCCS:NEC	1810	3.5	440	1180	1620	25.3	GAIN
2343	LAWYERS & NOTARIES	11450	22.4	4455	1070	5525	6.8	LOSS
2349	LAW & JURIS:NEC	2670	5.2	210	1245	1455	8.2	LOSS
2351	LIBRARIANS. ARCHIVIST	4640	9.1	365	2095	2460	7.8	LOSS
2399	OCCS IN SOC SCI:NEC	2220	4.3	625	1360	1985	25.2	GAIN
SOCIAL SCI.	TOTAL	51085	100.0	9950	19500	29450	9.0	
27	TEACHING							
2711	UNIVERSITY TEACHERS	11630	7.2	1405	1030	2515	2.5	LOSS
2719	UNIV TEACHING:NEC	4950	3.1	2015	1910	3925	17.1	GAIN
2731	ELEM.& KIND.TEACHERS	65590	40.9	3960	5870	9830	1.6	LOSS
2733	SECONDARY TEACHERS	43850	26.8	5115	2515	7630	2.0	LOSS
2739	ELEN.SEC.TEACHERS:NEC	8565	5.3	30	2770	2800	4.0	GAIN
2791	COMM.COLL.TEACHERS	8675	5.4	3130	2665	5795	11.7	GAIN
2793	POSTSEC.TEACHER:NEC	1430	0.9	-985	-785	-1770	-7.7	LOSS
2795	SPECIAL ED.TEACHERS:NEC	5235	3.3	780	2935	3715	13.2	GAIN
TEACHING	TOTAL	160455	100.0	16735	21470	38205	2.8	
31	MEDICINE							
3111	PHYSICIANS & SURG	14820	9.8	2420	1475	3895	3.3	LOSS
3131	NURSE.GRAD.NONSUPER	60535	38.7	710	20145	20855	4.3	GAIN
3134	NURSING ASSISTANTS	12785	8.2	-120	1640	1520	1.3	LOSS
3135	NURSING ATTENDANTS	22270	14.2	-1560	3680	2120	1.0	LOSS
3156	MED LAB TECHN	10405	6.6	775	3685	4460	5.8	GAIN
3157	DENTURISTS	6775	4.3	150	3160	3310	6.9	GAIN
MEDICINE	TOTAL	156600	100.0	5520	41870	47390	3.7	
33	ARTIST							
3311	PAINTERS & SCULPTORS	2535	9.5	900	1045	1945	15.7	GAIN
3313	DESIGNERS	2320	8.7	340	845	1185	7.4	LOSS
3314	ADVERT.ILLUSTR ART	4230	15.8	1365	1180	2545	9.6	GAIN
3315	PHOTO & CAMERA OPERATORS	2395	9.0	760	320	1080	6.2	LOSS
3330	PROD:PERFOM ARTS	1670	6.3	750	405	1155	12.5	GAIN
3332	MUSICIANS & SINGERS	5460	20.4	1855	390	2245	5.4	LOSS
3339	OCCS PERF ARTS:NEC	1445	5.5	620	375	995	12.8	GAIN
3352	WRITERS & ED:PUB	4425	16.6	1235	1535	2770	10.3	GAIN
ARTIST	TOTAL	26710	100.0	8515	7060	15575	9.1	
41	CLERICAL							
4111	SECRETARIES & STENO	57595	30.3	-45	20025	19960	4.3	LOSS
4113	TYPISTS & CLERK-TYP	13265	7.0	-45	1910	1845	1.5	LOSS
4131	BOOKKEEPERS	30160	15.9	1110	14950	16060	7.9	GAIN
4133	CASHIERS & TELLERS	12980	6.8	635	7020	7655	9.4	GAIN
4143	EDP EQUIP OPERATORS	7595	4.0	1180	4705	5885	16.1	GAIN
4161	LIB & FILE CLERKS	9325	4.9	40	1405	1445	1.7	LOSS
4171	RECEPTIONISTS	16200	8.5	190	7260	7450	6.4	GAIN
4197	GEN OFF CLERKS	9855	5.2	230	3760	3990	5.3	GAIN
CLERICAL	TOTAL	190160	100.0	5745	70745	76490	5.3	
61	SERVICE							
6115	GUARDS & OTH.SEC	12835	3.8	5025	1285	6310	7.0	GAIN
6120	SUPERV:FOOD.BEV PREP	26200	7.7	7195	5945	13140	7.2	GAIN
6121	CHEFS & COOKS	40395	11.9	10450	9910	20360	7.3	GAIN
6125	WAITERS	69320	20.4	3410	27775	31185	6.2	GAIN
6129	FOOD & BEV PREP:NEC	11410	3.4	1415	4635	6050	7.8	GAIN
6143	HAIRDRESSERS	22520	6.6	-1495	3970	2475	1.2	LOSS
6147	CHILD CARE OCCS	14050	4.1	270	6515	6785	6.8	GAIN
6191	JANITORS	52365	15.4	2640	7490	10130	2.2	LOSS
6198	LABOUR SERVICES	25425	7.5	8380	3180	11480	6.1	GAIN
SERVICE	TOTAL	339465	100.0	41985	73345	115330	4.2	

4.23 Public Administration

There were approximately 289,500 persons employed in this sector in 1981. The government sector remains the third largest employer in the province, although its employment share has dropped slightly from 7.6 percent in 1971 to 6.9 percent in 1981. The loss in employment share is the result of a lower annual employment growth rate (1.9 percent) when compared with the overall annual rate of employment (2.8 percent) for all industries over this period. The sector has created 50,370 jobs between 1971 and 1981, approximately 5 percent of total employment growth in the province.

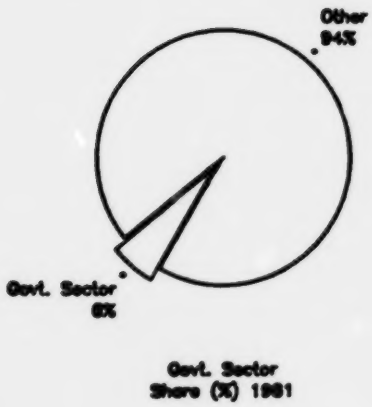
Five occupational groups are dominant in this sector; they together account for about 83 percent of total employment. These major occupational groups are: Clerical occupations; Managerial and Administrative occupations; Service occupations; Natural Sciences, Engineering and Mathematics occupations; and Social Sciences occupations.

4.23.1 Occupational Distribution Within the Industry

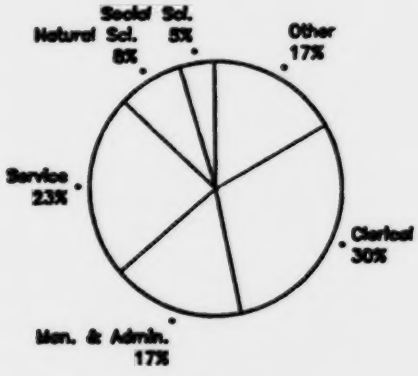
- Each of the 5 major occupational groups in this sector exhibits a higher employment concentration than the overall occupational distribution for all industries.

- With the exception of the Service occupations, where males are particularly dominant (85 percent), the employment proportions between males and females are close to the overall average for all industries.

FIGURE 75
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATION IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO, 1981

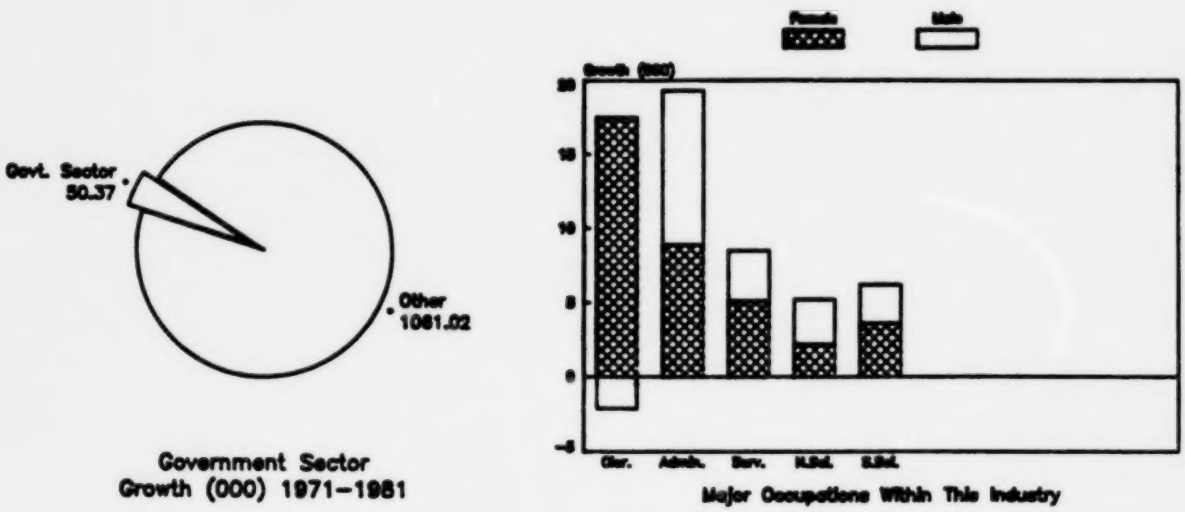


Govt. Sector
Share (%) 1981



Major Occupations
Share (%) 1981

FIGURE 76
EMPLOYMENT GROWTH BY MAJOR OCCUPATION & SEX, IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO, 1971 - 1981



4.23.2 Occupational Employment Growth Within the Industry

- Total employment in this sector grew by about 50,370 between 1971 and 1981, about 10,500 for males and 39,900 for females.

- Managerial and Administrative occupations contribute most to employment growth over this period (19,280), followed by Clerical occupations (15,390), Service occupations (8,550), Social Sciences occupations (6,150), and Natural Sciences, Engineering and Mathematics occupations (5,160).

- Among the 5 major occupational groups, females account for most of the new jobs in Clerical occupations, Service occupations, and Social Sciences occupations.

- In the case of Clerical occupations, male employment has actually declined by 2,100 over this period.

4.23.3 Occupational Employment Growth Rates Within the Industry

- Among the 5 major occupational groups, Social Sciences occupations exhibit the highest annual employment growth rate (6.6 percent), followed by Managerial and Administrative occupations (5.1 percent). In contrast, the annual employment growth rate for Service occupations (1.4 percent) is lower than the overall industry average for all occupations (1.9 percent).

- The extremely high employment growth rate for Social Sciences occupations has resulted in almost doubling the size of this occupation.

- Females have higher employment growth rates than males in each of the major occupational groups.

- As a result of higher than average employment growth rates, the following occupational groups have gained in employment share within the sector: Clerical occupations; Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; and Social Sciences occupations.

- Conversely, Service occupations have lost in employment share within this sector.

- On an overall basis, the government sector has lost in employment share among the 23 industry sectors.

FIGURE 77
EMPLOYMENT GROWTH RATES (%) BY MAJOR OCCUPATION AND SEX IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO, 1971 - 1981

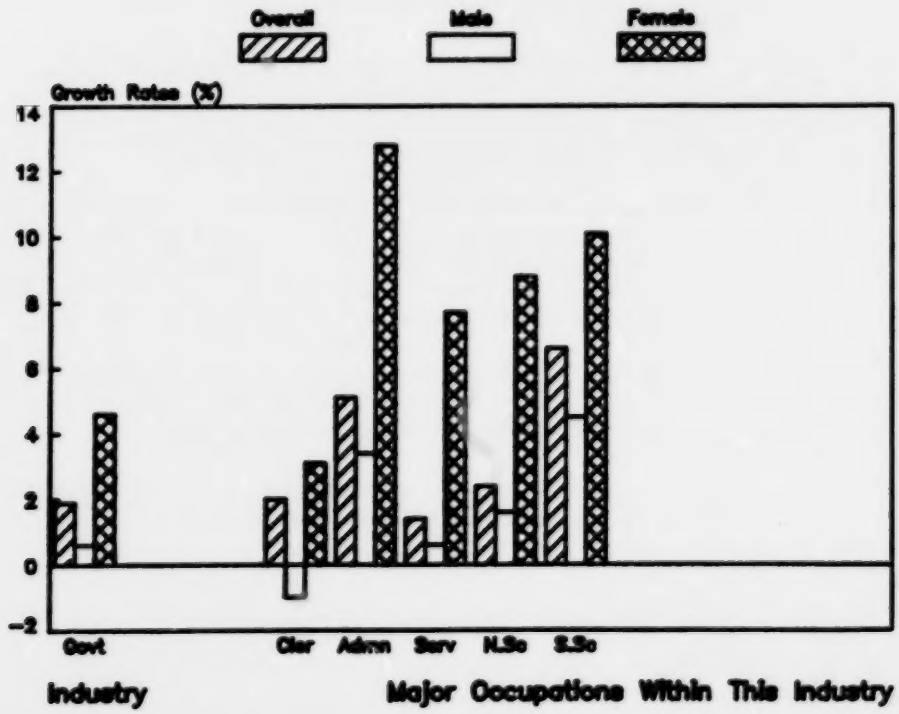


TABLE 31
SELECTED 4-DIGIT OCCUPATIONS IN THE PUBLIC ADMINISTRATION INDUSTRY

OCC CODE	OCCUPATION	1981 TOTAL EMPLD	1981 % SHARE	EMPLOYMENT GROWTH 71-81 MALE	FEMALE	TOTAL	% GROWTH RATE	SHARE GAIN/ LOSS
11	MAN. & ADMIN.							
1113	GOVT. ADMINISTRATORS	8290	16.8	1285	1125	2410	3.5	LOSS
1116	GOVT INSPECTORS	9625	19.5	1480	1150	2630	3.2	LOSS
1119	GOVT OFFICIALS. UNIQ	2570	5.2	1175	830	2005	16.4	GAIN
1130	GENERAL MANAGERS	1510	3.1	745	155	900	9.5	GAIN
1135	MGRS: FINANCIAL	1135	2.3	755	230	985	22.4	GAIN
1136	PERSONNEL MGMT OCCS	1640	3.3	875	465	1340	18.5	GAIN
1149	MGMT: NEC	2405	4.9	1115	175	1290	8.0	GAIN
1171	FINANCIAL OFFICERS	6705	13.6	1460	805	2265	4.2	LOSS
1174	PERSONNEL & REL OFF.	4520	9.2	-240	1560	1320	3.5	LOSS
1179	OCCS IN MGMT:NEC	5495	11.2	-545	1660	1115	2.3	LOSS
MAN. & ADMIN.	TOTAL	49245	100.0	10370	8915	19285	5.1	
21	NATURAL SCI.							
2117	PHYSICAL SCI TECHN	1325	5.5	-65	65	0	0.0	LOSS
2131	AGRICULTURALISTS	900	3.7	-340	50	-290	-2.8	LOSS
2133	BIOLOGISTS	855	3.5	245	115	360	5.6	GAIN
2143	CIVIL ENGINEERS	2385	9.9	425	15	440	2.1	LOSS
2144	ELECTRICAL ENGINEERS	930	3.9	250	0	250	3.2	GAIN
2145	INDUSTRIAL ENGINEERS	1510	6.3	550	395	945	10.3	GAIN
2159	PROFESSIONAL ENG: NEC	1735	7.2	950	235	1185	12.2	GAIN
2161	SURVEYORS	1180	4.9	-90	25	-65	-0.5	LOSS
2163	DRAUGHTING OCCUPATIONS	1820	7.6	-265	120	-145	-0.8	LOSS
2165	ENGINEERING TECHN	1790	7.4	85	55	140	0.8	LOSS
2169	OTHER OCCS:ARCH. ENG	265	1.1	-315	10	-305	-7.4	LOSS
2183	SYSTEMS ANALYSTS	3840	15.9	950	715	1665	5.8	GAIN
NATURAL SCI.	TOTAL	24095	100.0	2985	2170	5155	2.4	
23	SOCIAL SCI.							
2311	ECONOMISTS	1870	14.3	470	290	760	5.4	LOSS
2331	SOCIAL WORKERS	2495	19.1	500	940	1440	9.0	GAIN
2333	WELF COMM SERV OCCS	3005	23.1	215	965	1180	5.1	LOSS
2339	SOCIAL WORK OCCS:NEC	530	4.1	135	300	435	18.8	GAIN
2341	JUDGES & MAGISTRATES	675	5.2	190	35	225	4.1	LOSS
2343	LAWYERS & NOTARIES	1190	9.1	435	165	600	7.3	GAIN
2349	LAW & JURIS:NEC	570	4.4	115	200	315	8.4	GAIN
2351	LIBRARIANS. ARCHIVIST	635	4.9	120	180	300	6.6	GAIN
SOCIAL SCI.	TOTAL	13035	100.0	2600	3555	6155	6.6	
41	CLERICAL							
4111	SECRETARIES & STENO	14750	17.0	-60	2375	2315	1.7	LOSS
4113	TYPISTS & CLERK-TYP	6780	7.8	-345	-5	-350	-0.5	LOSS
4131	BOOKKEEPERS	11250	13.0	260	3575	3835	4.3	GAIN
4137	STATISTICAL CLERKS	2190	2.5	85	1165	1250	8.8	GAIN
4143	EDP EQUIP OPERATORS	5090	5.9	590	2090	2680	7.8	GAIN
4171	RECEPTIONISTS	2845	3.3	80	1635	1715	9.7	GAIN
4190	SUPERV:CLERICAL:NEC	3000	3.5	-1190	-80	-1270	-3.5	LOSS
4195	PERSONNEL CLERKS	1360	1.6	85	635	720	7.8	GAIN
4197	GEN OFF CLERKS	8675	10.0	-770	1785	1015	1.3	LOSS
4199	OTHER CLERICAL:NEC	14840	17.2	-1270	1430	160	0.1	LOSS
CLERICAL	TOTAL	86520	100.0	-2130	17525	15395	2.0	
61	SERVICE							
6111	FIRE-FIGHTING	9055	13.4	2405	65	2470	3.2	GAIN
6112	POLICE OFFICERS:GOVT	20045	29.7	4735	520	5255	3.1	GAIN
6115	GUARDS & OTH.SEC	7100	10.5	1160	1160	2320	4.0	GAIN
6116	CO:ARMED FORCES	4985	7.4	-1180	245	-935	-1.7	LOSS
6117	OTHER:ARMED FORCES	14700	21.8	-4385	1235	-3150	-1.9	LOSS
6119	PROTECTIVE SERV:NEC	2465	3.6	535	900	1435	9.1	GAIN
6191	JANITORS	4545	6.7	-175	505	330	0.8	LOSS
SERVICE	TOTAL	67565	100.0	3425	5125	8550	1.4	

APPENDIX A
EMPLOYMENT GROWTH DUE TO CHANGE IN INDUSTRY EMPLOYMENT AND CHANGE IN OCCUPATIONAL DISTRIBUTION ONTARIO, 1971-1981

Introduction:

This section describes the methodology used to analyze employment growth between 1971 and 1981. Changes in employment were decomposed into two components: one due to changes in industry employment and one due to changes in occupational distribution. The analysis was done for each of the 2- digit occupational groups in all 23 industry sectors.

The results are presented in Table A1 showing the total employment growth and its two components for each 2-digit occupational group for all industry sectors.

Methodology:

We define the occupational distribution, OC, for any occupation in any industry to be given by:

$$OC = \frac{OE}{IE}$$

where OE is the number of people employed in the particular occupation in that industry,
and IE is the total number of people employed in that particular industry.

Or, re-arranging the terms, we could say:

$$OE = (OC) \times (IE)$$

Now, as time advances, each of these factors will change, let us say by relatively small increments of Δ , and therefore at some later time we can say:

$$(OE + \Delta OE) = (OC + \Delta OC) \times (IE + \Delta IE)$$

Multiplying out, substituting the original relationship, and eliminating like terms, we find:

$$(\Delta OE) = (\Delta OC) \times (IE) + (\Delta IE) \times (OC) + (\Delta OC) \times (\Delta IE)$$

Or, in words, the change in occupational employment may be attributed to three terms, due to: the change in occupational distribution, the change in aggregate employment for that industry, and a product term. Since the product term is small in comparison to the other two terms, it can, with relatively small error, be apportioned equally into the first two terms.

The change in occupational employment can then be expressed as two terms: one arising from changes in occupational distribution in the industry, and one arising from changes in aggregate employment for that industry. Importantly, the occupational distribution term will reflect shifts in occupational patterns in the industry which are associated with technological change.

TABLE A1
EMPLOYMENT GROWTH DUE TO CHANGE IN INDUSTRY EMPLOYMENT AND CHANGE IN OCCUPATIONAL DISTRIBUTION, ONTARIO, 1971-1981

IND CODE	EMPLOYMENT GROWTH	TOTAL GROWTH (000)	MAN/ MACH (000)	MAT SCI (000)	SOC SCI (000)	REL -GION (000)	TEACH -ING (000)	MED/ H.LTH (000)	ART/ REC (000)	SPORTS (000)	CLERIC -AL (000)	SALES (000)	SERVICE (000)	FARM -ING (000)	FISH -ING (000)	FORESTRY (000)	MINE/ QUARY (000)	PROC -ESS (000)	MACHNS (000)	FAB/ ASSY (000)	CONST -RUCTN (000)	TRANSPT (000)	MATRL HANDL (000)	OTHER CRAFTS (000)	OTHER OCC (000)
ALL	INDUSTRIES	1008.6	168.3	79.9	38.0	2.1	48.7	54.0	25.0	5.0	256.1	98.1	133.6	7.1	0.2	0.5	-1.3	37.3	18.5	163.7	29.3	26.5	15.7	11.6	-115.2
	DUE TO IND GROWTH		73.1	36.2	16.1	3.6	64.2	62.3	13.5	2.9	234.1	125.5	151.6	13.2	0.1	4.0	0.7	36.0	31.3	85.5	42.9	35.4	21.6	12.8	
	DUE TO OCC CHANGE		87.2	21.7	15.8	-1.5	-23.4	-6.3	11.5	2.1	21.9	-31.4	-18.1	-6.0	0.1	-3.5	-2.0	7.4	-12.8	18.2	-13.7	-6.9	-5.8	-1.2	
1	AGRI. FISH. TRAP	7.6	0.3	0.4	0.0	0.0	0.0	1.0	0.0	0.0	2.0	0.5	0.2	2.5	0.2	0.2	0.0	-0.1	0.1	0.3	0.2	0.2	-0.0	-0.0	-0.5
	DUE TO IND GROWTH		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	7.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	DUE TO OCC CHANGE		0.3	0.3	0.0	0.0	0.0	0.9	0.0	0.0	1.9	0.5	0.1	-4.5	0.1	0.2	0.0	-0.1	0.0	0.3	0.2	0.2	-0.0	-0.0	
2	FORESTRY	4.9	0.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.0	0.1	0.2	0.0	2.4	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0
	DUE TO IND GROWTH		0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.0	2.9	0.0	0.2	0.1	0.2	0.2	0.3	0.1	0.0	
	DUE TO OCC CHANGE		0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-0.0	-0.1	0.1	0.0	-0.4	0.0	-0.1	-0.1	0.0	0.0	-0.2	-0.1	0.0	
3	MINERAL FUEL MINE	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.1
	DUE TO IND GROWTH		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	DUE TO OCC CHANGE		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
4	OTHER MINES	0.4	0.6	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.2	0.0	0.0	0.0	-0.9	0.2	-0.0	0.7	0.1	-0.3	-0.2	-0.1	-0.7
	DUE TO IND GROWTH		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	DUE TO OCC CHANGE		0.5	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	-1.1	0.1	-0.1	0.6	0.1	-0.4	-0.2	-0.1	
5	FOOD FEED TOBACCO	11.0	4.4	0.9	0.1	0.0	-0.0	0.0	0.1	0.0	1.0	-3.4	0.6	-0.5	0.0	0.0	0.0	5.2	-0.3	1.2	-0.0	0.5	1.6	-0.1	-0.2
	DUE TO IND GROWTH		0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.4	0.4	0.1	0.0	0.0	0.0	3.8	0.1	0.4	0.1	0.5	1.4	0.1	
	DUE TO OCC CHANGE		3.7	0.6	0.1	0.0	-0.0	0.0	0.0	0.0	0.1	-4.9	0.2	-0.6	0.0	0.0	0.0	1.3	-0.4	0.0	-0.1	-0.0	0.2	-0.2	
6	TEXTILES	15.6	1.6	0.3	0.0	0.0	0.1	0.1	0.2	0.0	1.0	0.1	-0.0	0.0	0.0	0.0	0.0	1.0	0.0	9.4	-0.0	0.1	0.9	0.0	-0.1
	DUE TO IND GROWTH		0.6	0.3	0.0	0.0	0.0	0.0	0.1	0.0	1.7	0.5	0.5	0.0	0.0	0.0	0.0	3.3	0.2	6.9	0.1	0.1	0.5	0.1	
	DUE TO OCC CHANGE		1.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	-0.4	-0.5	0.0	0.0	0.0	0.0	-2.3	-0.1	2.5	-0.1	0.0	0.4	-0.1	
7	WOOD & FURNITURE	21.6	1.9	0.2	0.0	0.0	0.0	0.0	0.1	0.0	1.9	0.1	0.1	-0.0	0.0	0.5	-0.0	2.5	0.6	18.3	0.0	0.3	1.6	-0.0	0.6
	DUE TO IND GROWTH		1.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	2.2	0.7	0.3	0.0	0.0	0.4	0.0	2.3	2.4	7.0	1.1	0.6	1.2	0.2	
	DUE TO OCC CHANGE		0.9	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.6	-0.2	-0.0	0.0	0.1	-0.0	0.2	-1.8	2.4	-0.3	-0.2	0.4	-0.2	
8	PAPER & ALLIED	18.8	4.4	0.9	0.1	0.0	0.0	0.0	2.0	0.0	3.3	-1.1	0.1	0.0	0.0	-0.1	0.0	2.0	-0.2	0.4	0.0	0.2	0.9	5.6	-0.5
	DUE TO IND GROWTH		1.2	0.4	0.0	0.0	0.0	0.0	1.0	0.0	3.4	1.4	0.3	0.0	0.0	0.1	0.0	2.0	0.4	2.3	0.3	0.3	0.8	4.1	
	DUE TO OCC CHANGE		3.2	0.4	0.1	0.0	0.0	-0.0	1.0	0.0	-0.1	-2.5	-0.2	0.0	0.0	-0.3	0.0	0.7	-0.5	-1.9	-0.3	-0.1	0.1	1.5	
9	PR METAL/FABRICAT	37.2	5.6	2.5	0.1	0.0	0.1	0.0	0.1	0.0	3.5	-0.1	0.1	0.0	0.0	0.0	-0.0	12.0	0.7	5.7	-0.1	0.7	2.0	0.0	-3.6
	DUE TO IND GROWTH		1.9	1.0	0.0	0.0	0.0	0.1	0.0	0.0	4.4	0.9	0.6	0.0	0.0	0.0	0.2	6.2	10.4	3.0	1.5	0.7	2.2	0.3	
	DUE TO OCC CHANGE		3.7	0.7	0.0	0.0	0.0	-0.1	0.0	0.0	-0.9	-1.0	-0.5	0.0	0.0	0.0	-0.3	5.0	-1.7	1.9	-1.6	0.0	-0.2	-0.3	
10	MOTOR VEH/PARTS	12.4	2.2	1.3	-0.1	0.0	0.0	0.1	0.0	0.0	0.2	-0.3	-0.1	0.0	0.0	0.0	0.0	-0.2	1.4	9.0	-0.3	-0.2	0.6	0.1	-0.4
	DUE TO IND GROWTH		0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.2	0.3	0.0	0.0	0.0	0.0	0.3	2.7	5.6	0.3	0.2	0.6	0.1	
	DUE TO OCC CHANGE		1.7	0.8	-0.1	0.0	0.0	0.1	0.0	0.0	-1.3	-0.5	-0.4	0.0	0.0	0.0	0.0	-0.4	-1.3	3.3	-0.6	-0.4	0.1	0.1	
11	MACH & OTH TRANSP	26.0	4.6	3.5	0.0	0.0	0.1	0.0	0.1	0.0	2.8	-0.3	0.1	0.0	0.0	0.0	0.1	1.2	5.1	6.7	0.1	0.1	0.4	-0.0	-0.6
	DUE TO IND GROWTH		1.9	2.5	0.0	0.0	0.0	0.0	0.1	0.0	4.5	1.0	0.3	0.0	0.0	0.0	0.0	0.6	5.9	6.7	0.6	0.2	0.6	0.1	
	DUE TO OCC CHANGE		2.7	1.0	-0.0	0.0	0.0	0.0	0.0	0.0	-1.7	-1.2	-0.2	0.0	0.0	0.0	0.0	0.7	-0.8	2.0	-0.5	-0.1	-0.3	-0.2	
12	ELECTRICAL PRODUC	13.7	3.8	2.8	0.1	0.0	0.0	0.1	0.1	0.0	0.8	-0.3	-0.1	0.0	0.0	0.0	0.0	1.0	-0.1	5.0	-0.4	-0.0	0.4	-0.0	-0.5
	DUE TO IND GROWTH		0.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.4	0.1	0.0	0.0	0.0	0.0	0.4	1.4	5.2	0.4	0.1	0.3	0.1	
	DUE TO OCC CHANGE		2.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-0.7	-0.2	0.0	0.0	0.0	0.0	0.7	-1.5	0.0	-0.8	-0.1	0.1	-0.1	

TABLE A1
EMPLOYMENT GROWTH DUE TO CHANGE IN INDUSTRY EMPLOYMENT AND CHANGE IN OCCUPATIONAL DISTRIBUTION, ONTARIO, 1971-1981

IND CODE	EMPLOYMENT GROWTH	TOTAL GROWTH (000)	NON/ NONIN (000)	MAT ECI (000)	SOC ECI (000)	RELI -GION (000)	TEACH -ING (000)	MED/ H.TH (000)	ART/ REC (000)	SPORTS (000)	CLERIC -AL (000)	SALES (000)	SERVICE (000)	FARM -ING (000)	FISH -ING (000)	FORESTRY (000)	MINE/ QUARY (000)	PROC -ESS (000)	MACHIN (000)	FAB/ ASSEY (000)	CONST -RUCTN (000)	TRANSPT (000)	MATRL HANDL (000)	OTHER CRAFTS (000)	OTHER OCC (000)
13	CHEM RUBBER/PETRL	25.9	6.5	3.5	6.3	6.0	6.1	6.4	6.0	6.0	2.9	-6.6	-6.2	6.1	6.0	6.0	-6.0	4.3	6.3	6.6	6.3	6.2	1.2	6.2	-6.2
	DUE TO IND GROWTH		2.4	2.3	6.1	6.0	6.0	6.2	6.1	6.0	4.5	1.5	6.5	6.0	6.0	6.0	6.0	4.1	6.7	4.8	6.6	6.5	1.0	6.5	
	DUE TO OCC CHANGE		4.1	1.1	6.2	6.0	6.1	6.2	-6.0	6.0	-1.6	-2.0	-6.6	6.0	6.0	6.0	-6.0	6.2	-6.5	1.0	-6.3	-6.3	-6.5	-6.3	
14	NON-MET MINERAL	2.0	1.2	6.3	6.1	6.0	6.1	6.0	6.1	6.0	6.3	-6.0	-6.2	-6.0	6.0	6.0	6.0	6.1	6.5	6.1	-6.2	6.1	6.1	-6.0	-6.5
	DUE TO IND GROWTH		6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.2	6.1	6.0	6.0	6.0	6.0	6.0	6.4	6.2	6.2	6.1	6.2	6.2	6.0	
	DUE TO OCC CHANGE		1.1	6.2	6.0	6.0	6.1	6.0	6.1	6.0	6.1	-6.1	-6.2	-6.0	6.0	6.0	6.0	-6.3	6.4	-6.1	-6.4	-6.1	-6.1	-6.0	
15	OTH MANF IND	14.0	2.0	6.5	6.1	6.0	6.0	6.7	6.4	6.0	1.5	-6.2	6.0	6.0	6.0	6.0	6.0	6.2	6.0	7.6	6.0	6.1	6.4	6.3	6.1
	DUE TO IND GROWTH		6.9	6.5	6.0	6.0	6.0	6.3	6.2	6.0	2.3	6.7	6.2	6.0	6.0	6.0	6.0	6.7	1.1	5.2	6.2	6.1	6.5	6.2	
	DUE TO OCC CHANGE		1.1	6.0	6.0	6.0	6.0	6.4	6.1	6.0	-6.8	-6.9	-6.2	6.0	6.0	6.0	6.0	-6.5	-1.1	2.5	-6.1	6.0	-6.1	6.0	
16	CONSTRUCTION	32.4	6.6	6.6	6.0	6.0	6.0	-6.0	6.0	6.0	6.9	6.5	6.1	2.6	6.0	-6.0	-6.5	6.3	-6.4	2.0	16.6	-6.7	-6.6	6.0	-2.5
	DUE TO IND GROWTH		1.7	6.7	6.0	6.0	6.0	6.0	6.0	6.0	2.4	6.4	6.3	6.9	6.0	6.0	6.2	6.2	1.2	1.1	20.6	1.0	6.4	6.1	
	DUE TO OCC CHANGE		4.9	-6.2	6.0	6.0	6.0	-6.0	-6.0	6.0	4.5	6.1	-6.2	1.6	6.0	-6.0	-6.7	6.1	-1.6	1.7	-4.6	-1.7	-1.2	-6.1	
17	UTILITIES	17.6	2.0	1.3	6.6	6.0	6.1	6.6	6.0	6.0	2.9	-6.2	6.1	-6.6	6.1	-6.2	-6.6	6.2	6.6	1.3	3.6	6.7	6.6	2.1	-6.1
	DUE TO IND GROWTH		1.6	2.5	6.6	6.0	6.1	6.6	6.0	6.0	3.5	6.3	6.4	6.1	6.1	6.0	6.0	6.1	6.3	1.6	3.7	6.6	6.6	1.7	
	DUE TO OCC CHANGE		1.6	6.7	-6.6	6.0	6.1	6.6	-6.6	6.0	-6.6	-6.5	-6.3	-6.1	6.6	-6.2	-6.6	6.1	6.2	6.2	-6.1	6.1	-6.6	6.3	
18	TRANSPORTATION	48.1	5.6	6.3	6.6	6.0	6.3	6.7	6.6	6.0	5.6	6.5	1.5	6.6	6.6	-6.6	6.6	6.6	6.6	2.7	1.7	16.3	2.2	-6.2	-6.6
	DUE TO IND GROWTH		1.5	6.7	6.6	6.0	6.1	6.2	6.6	6.0	6.6	6.6	1.7	6.1	6.6	6.6	6.6	6.1	6.3	2.9	2.7	16.6	2.2	6.3	
	DUE TO OCC CHANGE		3.5	-6.3	-6.1	6.0	6.2	6.6	6.0	6.0	6.0	-6.1	-6.2	-6.1	6.0	-6.1	-6.6	-6.1	-6.3	-6.2	-1.6	-2.5	6.1	-6.5	
19	COMMUNICATION	28.6	5.2	2.6	6.3	6.6	6.1	6.1	2.9	6.6	11.6	1.6	6.2	6.6	6.6	6.6	6.6	6.6	6.6	6.9	4.2	6.6	-6.6	6.7	6.1
	DUE TO IND GROWTH		2.3	1.3	6.1	6.6	6.1	6.6	1.9	6.6	15.6	6.6	6.4	6.6	6.6	6.6	6.6	6.6	6.6	6.6	3.6	6.2	6.4	6.6	
	DUE TO OCC CHANGE		2.9	6.6	6.2	6.6	-6.6	6.6	1.6	6.6	-4.7	6.4	-6.2	6.6	6.6	6.6	6.6	6.6	6.6	6.3	6.4	-6.2	-6.4	6.1	
20	TRADE	214.5	23.2	3.6	6.5	6.6	6.7	3.5	1.9	6.1	66.4	72.5	3.4	-6.1	6.6	6.6	6.6	4.6	1.4	22.6	1.6	4.7	3.1	6.4	6.6
	DUE TO IND GROWTH		9.7	1.5	6.2	6.6	6.2	1.9	1.3	6.6	58.5	85.6	5.6	6.6	6.6	6.6	6.6	4.1	2.6	25.6	1.9	6.6	6.6	6.5	
	DUE TO OCC CHANGE		13.5	2.1	6.3	6.6	6.5	1.6	6.6	6.6	15.9	-17.2	-2.3	-6.6	6.6	-6.6	-6.6	6.7	-6.6	-3.1	-6.4	-2.1	-3.5	-6.1	
21	FINANCE/INSURANCE	56.6	22.7	4.1	6.6	6.6	6.2	6.6	6.4	6.6	43.1	21.7	3.5	6.3	6.6	6.6	-6.6	-6.1	-6.4	6.1	6.5	6.6	-6.1	6.1	6.6
	DUE TO IND GROWTH		14.2	2.3	6.5	6.6	6.1	6.1	6.2	6.6	47.6	23.6	4.6	6.2	6.6	6.6	6.6	6.1	6.2	6.4	6.7	6.2	6.1	6.4	
	DUE TO OCC CHANGE		6.4	1.6	6.1	6.6	6.1	-6.1	6.1	6.6	-6.5	-1.3	-1.3	6.6	6.6	6.6	-6.6	-6.2	-6.6	-6.3	-6.2	-6.1	-6.3	-6.3	
22	COM/BUS SERVICES	416.3	36.4	22.4	25.5	2.6	36.2	47.4	15.6	4.1	76.5	7.3	115.3	6.9	6.6	6.6	6.6	1.5	1.7	7.1	1.6	5.6	1.3	2.6	1.2
	DUE TO IND GROWTH		23.7	14.5	15.2	3.6	63.6	56.7	7.9	2.6	65.9	7.7	103.7	3.2	6.6	6.6	6.6	1.2	2.6	5.7	3.2	3.6	1.6	2.6	
	DUE TO OCC CHANGE		12.7	7.9	14.2	-1.6	-26.6	-11.3	7.7	1.5	10.5	-6.5	-6.4	-2.3	6.6	-6.6	6.6	6.3	-6.3	1.5	-1.6	2.6	6.3	-6.1	
23	PUBLIC ADMIN	58.4	19.3	5.2	6.2	6.6	6.4	-6.5	1.6	6.6	15.4	-6.4	6.6	1.6	-6.6	-2.4	6.6	6.1	-6.2	6.7	-1.2	6.6	-6.6	-6.3	-2.5
	DUE TO IND GROWTH		7.4	4.1	1.9	6.6	6.5	6.6	6.4	6.2	15.6	6.2	12.1	6.9	6.6	6.4	6.6	6.1	6.1	6.6	1.6	1.6	6.3	6.6	
	DUE TO OCC CHANGE		11.6	1.1	4.3	6.6	-6.1	-1.3	6.6	6.6	6.4	-6.6	-3.5	6.1	-6.1	-2.6	6.6	6.1	-6.4	-6.1	-2.6	-1.6	-6.9	-6.9	
99	OTHER INDUSTRIES	-102.6	6.3	6.1	6.1	6.6	6.6	6.3	6.1	6.6	6.1	6.6	6.1	6.1	6.6	6.6	-6.1	6.6	-6.3	-6.2	6.1	-6.2	6.6	6.6	-104.2

The components of occupational employment change may be summed across industries if desired, so as to give an indication of the relative importance of contributions from growth in industrial aggregate employment or changes in magnitude of occupational distribution.

Summary of Findings

The change due to industry employment had a positive contribution to growth in all occupational groups.

Employment growth due to changes in industry growth were greater than that due to changes in occupational distribution in all except three occupational groups.

In Managerial, Administrative and Related occupations the growth due to changes in occupational distribution was larger than that due to industry growth.

Similarly, in the Social Sciences and Related occupations, the growth due to occupational change was larger than that contributed due to changes in industry.

The Mining and Quarrying occupations were the only group that had a net decline in employment level from 1971 to 1981. This decline was due to a negative change in occupational distribution that resulted in a larger loss than the gain contributed by change in industry growth.

Thirteen occupational groups had negative changes in occupational distribution resulting in job losses in those occupations. Therefore, positive overall growth in these occupational groups was solely due to growth in industry employment.

The remaining eight occupational groups had employment growth contributions both due to growth in industry, as well as, change in occupational distribution.

APPENDIX B
ANALYSIS OF CHANGE IN OCCUPATIONAL DISTRIBUTION FOR 2-DIGIT OCCUPATIONAL GROUPS IN 23 INDUSTRY SECTORS, ONTARIO, 1971-1981

Introduction

During the 1971-1981 period, some occupations gained in share of total employment and some lost in share. This is reflected in the increase or decrease in occupational distribution. Since the sum of the percentage distribution of these occupational groups must be 100 percent, the gains for some occupational groups have to be offset by losses for other occupational groups.

This appendix presents an analysis of the change in occupational distribution for each 2-digit occupational group in each of the 23 industry sectors, using Census data.

Methodology

The occupational distributions for each of the 23 industry sectors were first computed using the 1971 and 1981 Census data (1971 definitions). The change in percentage distribution for each 2-digit occupational group was then calculated by taking the difference in percentage distribution of each occupational group between 1971 and 1981.

This calculation resulted in 507 observations. Summary statistics were obtained to determine the type of distribution, the standard deviation, and the frequency of the changes in occupational distribution.

Summary Of Findings

The distribution of the 507 observations of change in percentage occupational distribution, approximates a normal curve with a mean of zero and a standard deviation of 1.415 percent. (See Table B1 and Figure B1.)

Therefore, 95 percent of the values lie within plus or minus 2.83 percent (2 x 1.415) and over 99 percent of the values lie within plus or minus 4.25 percent (3 x 1.415). In other words, 95 percent of the occupational groups experienced an increase or decrease in percentage occupational distribution that was less than 2.83 percent over the 1971-1981 period.

Slightly more than half of the occupational groups experienced a change in percentage distribution that was between +0.2 percent and -0.2 percent.

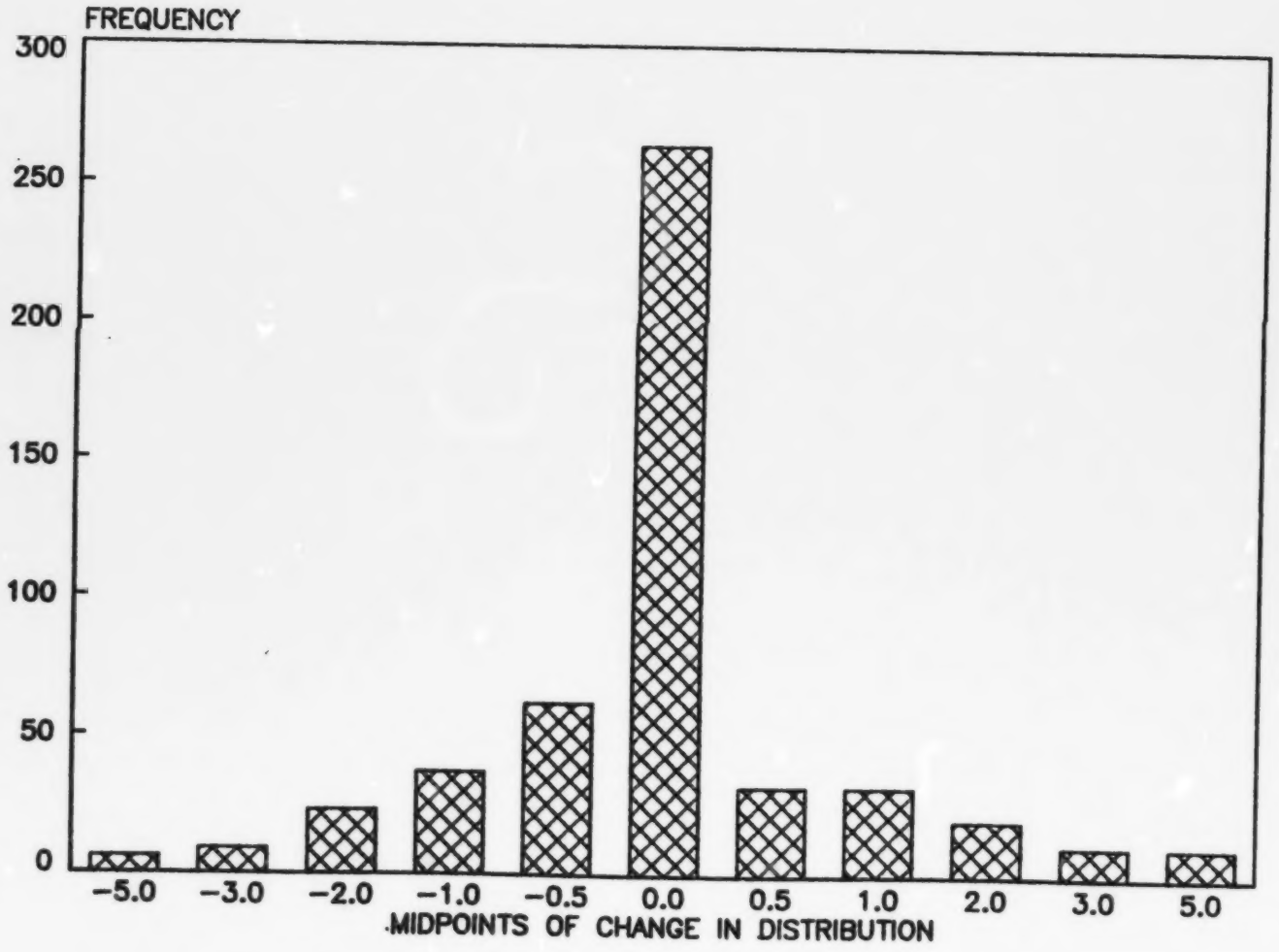
TABLE B1

ANALYSIS OF CHANGE IN OCCUPATIONAL DISTRIBUTION FOR 2-DIGIT OCCUPATIONAL GROUPS IN 23 INDUSTRY SECTORS, ONTARIO, 1971-1981

Range of Change in Distribution	Midpoints of Change In Distribution	Frequency	Percent	Cumulative Percent
-5.5 to -9.0	-6.0	3	0.59	0.59
-4.5 to -5.4	-5.0	1	0.20	0.79
-3.5 to -4.4	-4.0	5	0.99	1.78
-2.8 to -3.4	-3.0	3	0.59	2.37
-2.3 to -2.7	-2.5	6	1.18	3.55
-1.8 to -2.2	-2.0	13	2.56	6.11
-1.3 to -1.7	-1.5	14	2.76	8.88
-0.8 to -1.2	-1.0	30	5.92	14.79
-0.3 to -0.7	-0.5	62	12.23	27.02
0.2 to -0.2	0.0	264	52.07	79.09
0.3 to 0.7	0.5	32	6.31	85.40
0.8 to 1.2	1.0	23	4.54	89.94
1.3 to 1.7	1.5	18	3.55	93.49
1.8 to 2.2	2.0	8	1.58	95.07
2.3 to 2.7	2.5	6	1.18	96.25
2.8 to 3.4	3.0	4	0.79	97.04
3.5 to 4.4	4.0	9	1.78	98.82
4.5 to 5.4	5.0	3	0.59	99.41
5.5 to 6.5	6.0	3	0.59	100.00

Summary Statistics:
Number of Observations = 507
Mean = 0.00
Standard Deviation = 1.415
Minimum = -9.056
Maximum = 6.525
Sum = 0.00

FIGURE B1
CHANGE IN OCCUPATIONAL DISTRIBUTION, ONTARIO, 1971-1981



APPENDIX C1
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	0.2	69.8	30.2	0.2	0.6	70.5	29.5	0.4	0.2	0.1	0.35	4.5	10.8
21	NATURAL SCI.	0.2	91.3	8.7	0.2	0.6	72.0	28.8	0.4	0.2	0.1	0.36	4.7	9.9
23	SOCIAL SCI.	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	7.2
25	RELIGION	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.2	.
27	TEACHING	0.0	100.0	0.0	0.0	0.0	20.0	80.0	0.0	0.0	0.0	0.02	0.3	17.5
31	MEDICINE	0.9	76.2	23.8	0.7	1.9	50.5	49.5	1.4	0.2	0.7	0.95	12.5	7.3
33	ARTIST	0.1	38.5	61.5	0.1	0.1	35.7	64.3	0.1	0.0	0.0	0.01	0.1	0.7
37	SPORTS	0.0	62.5	37.5	0.0	0.0	55.6	44.4	0.0	0.0	0.0	0.01	0.1	1.2
41	CLERICAL	1.5	19.3	80.7	1.2	3.5	7.4	92.6	2.6	-0.0	2.1	2.04	26.7	9.1
51	SALES	0.7	57.9	42.1	0.6	1.3	44.7	55.3	0.9	0.1	0.4	0.54	7.1	5.7
61	SERVICE	0.4	38.9	61.1	0.4	0.6	56.0	44.0	0.5	0.2	0.0	0.18	2.3	3.3
71	FARMING	119.4	74.8	25.2	93.3	121.9	72.5	27.5	89.9	-1.0	3.5	2.49	32.6	0.2
73	FISHING	0.9	95.0	5.0	0.7	1.1	88.8	11.2	0.8	0.1	0.1	0.18	2.4	1.8
75	FORESTRY	0.1	66.7	33.3	0.1	0.3	78.7	21.3	0.2	0.2	0.0	0.23	3.0	15.1
77	MINING	0.0	50.0	50.0	0.0	0.0	100.0	0.0	0.0	0.0	-0.0	0.04	0.5	17.5
81	PROCESSING	0.8	32.9	67.1	0.6	0.7	40.1	59.9	0.5	0.0	-0.1	-0.08	-1.0	-1.0
83	MACHINING	0.0	100.0	0.0	0.0	0.1	100.0	0.0	0.1	0.0	0.0	0.05	0.7	13.3
85	FABRICATING	0.1	85.0	15.0	0.1	0.4	95.1	4.9	0.3	0.3	0.0	0.30	4.0	15.0
87	CONSTRUCTION	0.1	100.0	0.0	0.1	0.3	92.9	7.1	0.3	0.2	0.0	0.24	3.2	12.8
91	TRANSPORTATION	0.5	98.0	2.0	0.4	0.7	92.5	7.5	0.5	0.2	0.0	0.22	2.9	3.7
93	MAT. HANDLING	0.5	39.2	60.8	0.4	0.5	54.1	45.9	0.4	0.1	-0.1	-0.02	-0.3	-8.4
95	OTHER CRAFTS	0.1	100.0	0.0	0.0	0.0	100.0	0.0	0.0	-0.0	0.0	-0.03	-0.5	-8.4
99	OTHER OCC.	1.3	58.4	41.6	1.1	0.9	60.1	39.9	0.7	-0.3	-0.2	-0.45	-6.0	-4.0
	TOTAL	127.9	73.7	26.3	100.0	135.5	78.2	29.8	100.0	0.9	6.7	7.64	100.0	0.6

APPENDIX C2
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FORESTRY INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	0.1	94.4	5.6	1.2	0.3	85.7	14.3	2.6	0.2	0.0	0.23	4.6	13.3
21	NATURAL SCI.	0.2	97.7	2.3	3.0	1.1	86.7	13.3	9.3	0.8	0.1	0.91	18.6	18.0
23	SOCIAL SCI.	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.1	.
25	RELIGION	0.0	100.0	0.0	0.1	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.1	.
27	TEACHING	0.0	50.0	50.0	0.1	0.0	100.0	0.0	0.1	0.0	-0.0	0.00	0.0	0.0
31	MEDICINE	0.0	.	.	0.0	0.0	0.0	100.0	0.1	0.0	0.0	0.01	0.3	.
33	ARTIST	0.0	100.0	0.0	0.1	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.1	.
37	SPORTS	0.0	100.0	0.0	0.1	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.1	.
41	CLERICAL	0.2	44.7	55.3	3.2	0.6	31.7	68.3	5.2	0.1	0.3	0.40	8.0	10.4
51	SALES	0.0	100.0	0.0	0.6	0.0	83.3	16.7	0.2	-0.0	0.0	-0.01	-0.2	-2.8
61	SERVICE	0.2	62.8	37.2	3.0	0.3	53.4	46.6	2.4	0.0	0.1	0.08	1.5	3.0
71	FARMING	0.2	71.9	28.1	2.2	0.4	66.7	33.3	3.1	0.1	0.1	0.22	4.4	8.9
73	FISHING	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
75	FORESTRY	4.4	95.1	4.9	60.3	6.8	87.9	12.1	55.9	1.8	0.6	2.43	49.4	4.5
77	MINING	0.0	100.0	0.0	0.1	0.0	0.0	100.0	0.0	-0.0	0.0	0.00	0.0	0.0
81	PROCESSING	0.3	94.8	5.2	4.0	0.4	91.7	8.3	3.0	0.1	0.0	0.07	1.4	2.2
83	MACHINING	0.1	100.0	0.0	2.0	0.1	100.0	0.0	1.2	-0.0	0.0	-0.00	-0.1	-0.4
85	FABRICATING	0.3	97.0	3.0	4.6	0.6	98.3	1.7	4.7	0.2	0.0	0.24	4.9	5.6
87	CONSTRUCTION	0.2	100.0	0.0	3.1	0.4	100.0	0.0	3.0	0.1	0.0	0.15	3.0	5.1
91	TRANSPORTATION	0.5	100.0	0.0	6.8	0.6	95.2	4.8	5.2	0.1	0.0	0.13	2.7	2.4
93	MAT. HANDLING	0.2	96.8	3.2	2.1	0.2	100.0	0.0	1.5	0.0	-0.0	0.03	0.5	1.5
95	OTHER CRAFTS	0.0	77.8	22.2	0.6	0.1	94.1	5.9	0.7	0.0	-0.0	0.04	0.8	6.6
99	OTHER OCC.	0.2	83.3	16.7	2.9	0.2	84.4	15.6	1.8	0.0	0.0	0.01	0.3	0.7
	TOTAL	7.3	92.3	7.7	100.0	12.2	84.9	15.1	100.0	3.6	1.3	4.91	100.0	5.3

APPENDIX C3
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MINERAL FUEL MINES & WELLS INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	0.1	94.4	5.6	9.9	0.3	71.4	28.6	16.1	0.1	0.1	0.19	22.9	12.0
21	NATURAL SCI.	0.1	96.3	3.7	14.9	0.3	86.5	13.5	15.0	0.1	0.0	0.13	15.1	6.8
23	SOCIAL SCI.	0.0	100.0	0.0	1.1	0.0	50.0	50.0	2.3	0.0	0.0	0.03	3.6	14.9
31	MEDICINE	0.0	.	.	0.0	0.0	0.0	100.0	0.3	0.0	0.0	0.00	0.6	.
33	ARTIST	0.0	100.0	0.0	0.6	0.0	0.0	100.0	0.3	-0.0	0.0	0.00	0.0	0.0
41	CLERICAL	0.3	32.1	67.9	30.9	0.6	30.0	70.0	37.5	0.1	0.3	0.37	44.6	8.8
51	SALES	0.0	100.0	0.0	5.0	0.0	100.0	0.0	2.3	-0.0	0.0	-0.00	-0.6	-1.2
61	SERVICE	0.0	71.4	28.6	3.9	0.0	71.4	28.6	2.0	0.0	0.0	0.00	0.0	0.0
75	FORESTRY	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
77	MINING	0.1	100.0	0.0	6.1	0.2	100.0	0.0	8.9	0.1	0.0	0.10	12.0	10.9
81	PROCESSING	0.0	100.0	0.0	2.8	0.1	85.7	14.3	4.0	0.0	0.0	0.04	5.4	10.8
83	MACHINING	0.0	100.0	0.0	1.7	0.0	100.0	0.0	0.3	-0.0	0.0	-0.01	-1.2	-10.4
85	FABRICATING	0.0	100.0	0.0	2.8	0.0	100.0	0.0	2.3	0.0	0.0	0.02	1.8	4.8
87	CONSTRUCTION	0.0	100.0	0.0	1.1	0.0	100.0	0.0	2.3	0.0	0.0	0.03	3.6	14.9
91	TRANSPORTATION	0.0	100.0	0.0	5.0	0.0	100.0	0.0	0.6	-0.0	0.0	-0.03	-4.2	-14.8
93	MAT. HANDLING	0.0	100.0	0.0	1.1	0.0	80.0	20.0	1.4	0.0	0.0	0.01	1.8	9.6
95	OTHER CRAFTS	0.0	100.0	0.0	2.8	0.0	100.0	0.0	2.9	0.0	0.0	0.02	3.0	7.2
99	OTHER OCC.	0.1	84.2	15.8	10.5	0.0	100.0	0.0	1.4	-0.1	-0.0	-0.07	-8.4	-12.5
	TOTAL	0.9	75.1	24.9	100.0	1.7	64.0	36.0	100.0	0.4	0.4	0.83	100.0	6.7

APPENDIX C4
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	1.2	94.0	6.0	3.1	1.7	86.6	13.4	4.5	0.4	0.2	0.56	135.4	4.0
21	NATURAL SCI.	3.1	96.6	3.4	8.2	3.4	92.1	7.9	9.0	0.2	0.2	0.32	78.0	1.0
23	SOCIAL SCI.	0.0	60.0	40.0	0.1	0.1	58.3	41.7	0.3	0.1	0.0	0.09	23.2	17.0
27	TEACHING	0.0	100.0	0.0	0.1	0.1	100.0	0.0	0.3	0.1	0.0	0.07	17.1	11.6
31	MEDICINE	0.1	100.0	0.0	0.4	0.1	81.5	18.5	0.4	-0.0	0.0	-0.00	-0.0	0.0
33	ARTIST	0.0	100.0	0.0	0.1	0.0	100.0	0.0	0.1	0.0	0.0	0.00	0.0	0.0
41	CLERICAL	2.5	47.6	52.4	6.8	3.0	32.5	67.5	7.9	-0.2	0.7	0.46	111.0	1.7
51	SALES	0.1	93.1	6.9	0.4	0.1	89.3	10.7	0.4	-0.0	0.0	-0.00	-1.2	-0.4
61	SERVICE	0.6	90.2	9.8	1.6	0.8	80.0	20.0	2.2	0.1	0.1	0.21	51.2	3.0
71	FARMING	0.1	100.0	0.0	0.2	0.1	85.0	15.0	0.3	0.0	0.0	0.01	3.7	1.6
73	FISHING	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.1	0.0	0.0	0.01	1.2	2.9
77	MINING	15.6	99.5	0.5	41.7	14.7	98.3	1.7	38.8	-1.1	0.2	-0.92	-224.4	-0.6
81	PROCESSING	1.8	99.2	0.8	4.8	2.0	94.7	5.3	5.2	0.1	0.1	0.16	37.8	0.8
83	MACHINING	1.2	99.6	0.4	3.2	1.1	98.3	1.7	3.0	-0.1	0.0	-0.04	-9.8	-0.3
85	FABRICATING	3.2	98.9	1.1	8.5	3.9	99.4	0.6	10.2	0.7	-0.0	0.69	167.1	2.0
87	CONSTRUCTION	2.1	99.8	0.2	5.7	2.3	98.9	1.1	6.0	0.1	0.0	0.12	29.3	0.5
91	TRANSPORTATION	2.1	99.3	0.7	5.7	1.8	96.9	3.1	4.8	-0.4	0.0	-0.34	-84.1	-1.7
93	MAT. HANDLING	1.6	99.4	0.6	4.3	1.4	97.9	2.1	3.8	-0.2	0.0	-0.19	-45.1	-1.2
95	OTHER CRAFTS	0.5	97.8	2.2	1.2	0.4	98.7	1.3	1.0	-0.1	-0.0	-0.08	-19.5	-1.9
99	OTHER OCC.	1.4	95.1	4.9	3.8	0.7	92.5	7.5	1.9	-0.7	-0.0	-0.70	-170.7	-6.5
	TOTAL	37.5	95.1	4.9	100.0	37.9	91.1	8.9	100.0	-1.1	1.5	0.41	100.0	0.1

APPENDIX C5
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	3.6	91.2	8.8	4.3	8.0	84.7	15.3	8.4	3.5	0.9	4.43	37.8	8.4
21	NATURAL SCI.	1.6	83.9	16.1	1.9	2.5	73.2	26.8	2.6	0.5	0.4	0.88	7.5	4.5
23	SOCIAL SCI.	0.1	64.7	35.3	0.1	0.2	55.3	44.7	0.2	0.0	0.1	0.10	0.9	8.4
27	TEACHING	0.0	75.0	25.0	0.0	0.0	100.0	0.0	0.0	-0.0	-0.0	-0.01	-0.1	-12.9
31	MEDICINE	0.2	13.9	86.1	0.2	0.2	22.0	78.0	0.2	0.0	0.0	0.02	0.2	1.3
33	ARTIST	0.1	75.0	25.0	0.1	0.1	60.9	39.1	0.1	0.0	0.0	0.05	0.5	6.7
41	CLERICAL	12.2	49.1	50.9	14.6	14.0	40.5	59.5	14.7	-0.3	2.1	1.77	15.1	1.4
51	SALES	12.4	82.2	17.8	14.9	9.0	72.2	27.8	9.4	-3.7	0.3	-3.42	-29.2	-3.2
61	SERVICE	2.7	74.9	25.1	3.2	3.3	72.7	27.3	3.4	0.4	0.2	0.56	4.8	1.9
71	FARMING	0.8	71.9	28.1	0.9	0.2	77.1	22.9	0.3	-0.4	-0.2	-0.52	-4.5	-10.9
73	FISHING	0.1	76.9	23.1	0.1	0.1	94.1	5.9	0.1	0.0	-0.0	0.02	0.2	2.7
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.00	0.0	7.2
81	PROCESSING	26.7	72.4	27.6	32.0	31.9	68.7	31.3	33.5	2.6	2.6	5.16	44.0	1.8
83	MACHINING	0.9	95.8	4.2	1.1	0.6	91.5	8.5	0.7	-0.3	0.0	-0.30	-2.6	-3.7
85	FABRICATING	2.4	94.9	5.1	2.9	3.7	96.2	3.8	3.9	1.2	0.0	1.23	10.5	4.2
87	CONSTRUCTION	0.7	98.5	1.5	0.8	0.6	100.0	0.0	0.7	-0.0	-0.0	-0.02	-0.2	-0.4
91	TRANSPORTATION	3.8	99.6	0.4	4.6	4.3	98.1	1.9	4.5	0.4	0.1	0.51	4.3	1.3
93	MAT. HANDLING	9.9	46.7	53.3	11.9	11.5	48.6	51.4	12.1	0.9	0.6	1.57	13.4	1.5
95	OTHER CRAFTS	1.0	98.5	1.5	1.2	0.9	97.8	2.2	1.0	-0.1	0.0	-0.06	-0.5	-0.6
99	OTHER OCC.	4.3	77.0	23.0	5.2	4.1	74.4	25.6	4.3	-0.3	0.0	-0.25	-2.1	-0.6
	TOTAL	83.4	71.3	28.7	100.0	95.1	67.3	32.7	100.0	4.5	7.2	11.73	100.0	1.3

APPENDIX C6
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	1.4	88.6	11.4	2.8	3.1	78.0	22.0	4.6	1.1	0.5	1.65	10.6	7.9
21	NATURAL SCI.	0.8	90.4	9.6	1.5	1.1	85.3	14.7	1.7	0.3	0.1	0.34	2.2	3.7
23	SOCIAL SCI.	0.0	66.7	33.3	0.1	0.0	57.1	42.9	0.1	0.0	0.0	0.01	0.0	1.6
27	TEACHING	0.0	0.0	100.0	0.0	0.1	25.0	75.0	0.1	0.0	0.1	0.09	0.6	25.9
31	MEDICINE	0.0	0.0	100.0	0.1	0.1	16.7	83.3	0.1	0.0	0.0	0.06	0.4	11.6
33	ARTIST	0.4	40.0	60.0	0.8	0.6	32.3	67.7	1.0	0.1	0.2	0.25	1.6	5.0
41	CLERICAL	5.5	38.1	61.9	10.7	7.3	30.6	69.4	10.9	0.1	1.6	1.77	11.4	2.8
51	SALES	1.9	76.6	23.4	3.8	2.1	61.4	38.6	3.1	-0.2	0.3	0.11	0.7	0.6
61	SERVICE	1.8	53.5	46.5	3.4	1.7	45.3	54.7	2.6	-0.2	0.1	-0.04	-0.3	-0.3
71	FARMING	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	.
73	FISHING	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	-0.0	0.0	0.00	0.0	0.0
75	FORESTRY	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
77	MINING	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.00	0.0	0.0
81	PROCESSING	11.9	52.9	47.1	23.2	12.9	47.3	52.7	19.3	-0.2	1.2	1.01	6.5	0.8
83	MACHINING	0.7	74.3	25.7	1.4	0.7	75.8	24.2	1.1	0.0	0.0	0.04	0.3	0.6
85	FABRICATING	21.7	27.1	72.9	42.4	31.1	23.2	76.8	46.6	1.3	8.0	9.38	60.2	3.7
87	CONSTRUCTION	0.4	97.2	2.8	0.7	0.3	95.7	4.3	0.5	-0.0	0.0	-0.01	-0.1	-0.3
91	TRANSPORTATION	0.3	98.0	2.0	0.5	0.3	96.9	3.1	0.5	0.1	0.0	0.07	0.4	2.5
93	MAT. HANDLING	1.6	39.5	60.5	3.1	2.5	45.1	54.9	3.8	0.5	0.4	0.93	6.0	4.7
95	OTHER CRAFTS	0.4	78.7	21.2	0.8	0.4	78.7	21.2	0.6	0.0	0.0	0.00	0.0	0.0
99	OTHER OCC.	2.4	54.2	45.8	4.6	2.3	45.0	55.0	3.4	-0.3	0.2	-0.10	-0.6	-0.4
	TOTAL	51.3	43.4	56.6	100.0	66.8	37.3	62.7	100.0	2.7	12.9	15.58	100.0	2.7

APPENDIX C7
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE WOOD & FURNITURE INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	1.3	91.4	8.6	3.7	3.2	85.2	14.8	5.7	1.5	0.4	1.91	8.8	9.6
21	NATURAL SCI.	0.3	98.5	1.5	1.0	0.5	96.3	3.7	1.0	0.2	0.0	0.20	0.9	4.7
23	SOCIAL SCI.	0.0	100.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.01	0.0	11.6
27	TEACHING	0.0	.	.	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.02	0.1	.
31	MEDICINE	0.0	33.3	66.7	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.01	0.0	2.9
33	ARTIST	0.1	86.4	13.6	0.3	0.2	74.4	25.6	0.3	0.1	0.0	0.08	0.4	5.9
41	CLERICAL	3.6	44.1	55.9	10.5	5.6	36.8	63.2	9.9	0.4	1.5	1.94	9.0	4.4
51	SALES	1.4	92.7	7.3	4.1	1.5	80.6	19.4	2.8	-0.1	0.2	0.12	0.6	0.8
61	SERVICE	0.5	78.4	21.6	1.5	0.6	64.1	35.9	1.1	0.0	0.1	0.13	0.6	2.3
71	FARMING	0.0	100.0	0.0	0.1	0.0	100.0	0.0	0.0	-0.0	0.0	-0.02	-0.1	-6.7
73	FISHING	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.0	.
75	FORESTRY	0.7	98.5	1.5	1.9	1.1	97.8	2.2	2.1	0.5	0.0	0.49	2.3	5.8
77	MINING	0.0	100.0	0.0	0.1	0.0	100.0	0.0	0.0	-0.0	0.0	-0.03	-0.1	-9.3
81	PROCESSING	3.6	88.5	11.5	10.6	6.2	85.5	14.5	11.0	2.1	0.5	2.54	11.8	5.4
83	MACHINING	4.6	87.0	13.0	13.2	5.2	85.8	14.2	9.3	0.5	0.1	0.63	2.9	1.3
85	FABRICATING	11.5	80.8	19.2	33.5	21.8	75.2	24.8	38.9	7.1	3.2	10.25	47.5	6.6
87	CONSTRUCTION	1.9	97.2	2.8	5.6	2.7	95.2	4.8	4.9	0.7	0.1	0.79	3.7	3.5
91	TRANSPORTATION	1.0	100.0	0.0	2.9	1.3	98.9	1.1	2.4	0.3	0.0	0.33	1.5	2.9
93	MAT. HANDLING	1.7	84.8	15.2	5.0	3.3	86.2	13.8	5.9	1.4	0.2	1.62	7.5	6.9
95	OTHER CRAFTS	0.3	98.4	1.6	0.9	0.3	98.2	1.8	0.5	-0.0	0.0	-0.03	-0.1	-1.0
99	OTHER OCC.	1.7	79.4	20.6	5.1	2.3	75.5	24.5	4.1	0.4	0.2	0.56	2.6	2.8
	TOTAL	34.5.	81.7	18.3	100.0	56.1	77.1	22.9	100.0	15.0	6.5	21.58	100.0	5.0

APPENDIX C8
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PAPER & ALLIED INDUSTRIES INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	4.2	87.9	12.1	4.7	8.6	79.4	20.6	7.9	3.1	1.3	4.39	23.4	7.4
21	NATURAL SCI.	1.9	94.4	5.6	2.1	2.8	86.8	13.2	2.5	0.6	0.3	0.87	4.6	3.9
23	SOCIAL SCI.	0.1	66.7	33.3	0.1	0.2	51.2	48.8	0.2	0.1	0.1	0.13	0.7	10.6
25	RELIGION	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
27	TEACHING	0.0	100.0	0.0	0.1	0.1	57.9	42.1	0.1	0.0	0.0	0.04	0.2	6.6
31	MEDICINE	0.1	11.1	88.9	0.1	0.1	29.4	70.6	0.1	0.0	-0.0	-0.00	-0.0	-0.6
33	ARTIST	4.5	72.8	27.2	4.9	6.5	59.8	40.2	5.9	0.6	1.4	2.02	10.7	3.8
41	CLERICAL	16.7	36.4	63.6	18.4	20.1	29.5	70.5	18.2	-0.2	3.5	3.34	17.7	1.8
51	SALES	7.8	90.0	10.0	8.6	6.7	73.2	26.8	6.1	-2.1	1.0	-1.13	-6.0	-1.5
61	SERVICE	1.5	81.8	18.2	1.7	1.6	78.1	21.9	1.5	0.0	0.1	0.08	0.5	0.5
71	FARMING	0.0	100.0	0.0	0.0	0.0	90.0	10.0	0.0	0.0	0.0	0.01	0.1	2.3
75	FORESTRY	0.8	99.4	0.6	0.9	0.7	98.6	1.4	0.6	-0.1	0.0	-0.13	-0.7	-1.7
77	MINING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	11.6
81	PROCESSING	9.6	96.8	3.2	10.5	12.3	93.4	6.6	11.2	2.3	0.5	2.77	14.8	2.6
83	MACHINING	2.0	94.9	5.1	2.2	1.8	90.8	9.2	1.6	-0.3	0.1	-0.19	-1.0	-1.0
85	FABRICATING	11.8	76.2	23.8	13.0	12.2	76.8	23.2	11.1	0.3	0.0	0.35	1.9	0.3
87	CONSTRUCTION	1.8	99.7	0.3	2.0	1.8	98.9	1.1	1.7	0.0	0.0	0.03	0.2	0.2
91	TRANSPORTATION	1.7	98.5	1.5	1.9	2.0	93.6	6.4	1.8	0.1	0.1	0.24	1.3	1.3
93	MAT. HANDLING	3.8	67.2	32.8	4.2	4.7	62.8	37.2	4.3	0.4	0.5	0.89	4.7	2.1
95	OTHER CRAFTS	19.4	82.3	17.7	21.2	25.0	73.0	27.0	22.7	2.3	3.3	5.61	29.8	2.6
99	OTHER OCC.	3.3	74.8	25.2	3.7	2.8	69.1	30.9	2.5	-0.6	0.0	-0.53	-2.8	-1.7
	TOTAL	91.2	75.4	24.6	100.0	110.0	68.5	31.5	100.0	6.6	12.2	18.81	100.0	1.9

APPENDIX C9
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	5.4	91.5	8.5	3.9	11.1	88.9	11.1	6.2	4.8	0.8	5.61	15.1	7.3
21	NATURAL SCI.	6.4	98.1	1.9	4.6	9.0	93.3	6.7	5.0	2.1	0.5	2.53	6.8	3.4
23	SOCIAL SCI.	0.1	81.0	19.0	0.1	0.2	79.4	20.6	0.1	0.1	0.0	0.07	0.2	4.9
27	TEACHING	0.0	100.0	0.0	0.0	0.1	89.5	10.5	0.1	0.0	0.0	0.06	0.2	10.5
31	MEDICINE	0.2	51.1	48.9	0.2	0.2	36.2	63.8	0.1	-0.0	0.0	0.00	0.0	0.0
33	ARTIST	0.2	87.5	12.5	0.1	0.2	75.0	25.0	0.1	0.0	0.0	0.08	0.2	4.1
41	CLERICAL	17.2	54.9	45.1	12.2	20.7	44.2	55.8	11.6	-0.3	3.8	3.53	9.5	1.9
51	SALES	3.7	97.6	2.4	2.6	3.6	92.7	7.3	2.0	-0.3	0.2	-0.11	-0.3	-0.3
61	SERVICE	2.5	89.9	10.1	1.7	2.6	87.5	12.5	1.5	0.1	0.1	0.14	0.4	0.6
71	FARMING	0.0	87.5	12.5	0.0	0.1	75.0	25.0	0.0	0.0	0.0	0.04	0.1	7.2
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	-0.0	0.0	0.00	0.0	0.0
77	MINING	0.9	97.3	2.7	0.7	0.9	94.4	5.6	0.5	-0.1	0.0	-0.04	-0.1	-0.4
81	PROCESSING	20.9	96.9	3.1	14.8	32.9	94.7	5.3	18.5	10.9	1.1	12.00	32.2	4.6
83	MACHINING	40.3	93.8	6.2	28.6	49.0	91.6	8.4	27.5	7.1	1.6	8.69	23.3	2.0
85	FABRICATING	13.6	87.2	12.8	9.7	19.3	87.0	13.0	10.8	4.9	0.8	5.69	15.3	3.6
87	CONSTRUCTION	6.3	97.8	2.2	4.4	6.1	98.3	1.7	3.4	-0.1	-0.0	-0.14	-0.4	-0.2
91	TRANSPORTATION	2.5	99.6	0.4	1.8	3.2	98.7	1.3	1.8	0.7	0.0	0.70	1.9	2.5
93	MAT. HANDLING	8.4	90.1	9.9	6.0	10.4	88.9	11.1	5.8	1.6	0.3	1.96	5.3	2.1
95	OTHER CRAFTS	1.3	95.1	4.9	0.9	1.3	95.2	4.8	0.8	0.0	0.0	0.02	0.1	0.2
99	OTHER OCC.	11.1	89.6	10.4	7.8	7.4	84.8	15.2	4.2	-3.6	-0.0	-3.61	-9.7	-3.9
	TOTAL	141.1	88.7	11.3	100.0	178.4	85.9	14.1	100.0	28.0	9.3	37.23	100.0	2.4

APPENDIX C10
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	2.2	95.2	4.8	2.7	4.4	88.2	11.8	4.7	1.8	0.4	2.24	16.7	7.3
21	NATURAL SCI.	2.8	98.6	1.4	3.5	4.1	94.6	5.4	4.3	1.1	0.2	1.28	9.5	3.8
23	SOCIAL SCI.	0.1	91.3	8.7	0.1	0.1	92.3	7.7	0.1	-0.0	-0.0	-0.05	-0.4	-5.5
27	TEACHING	0.0	100.0	0.0	0.0	0.1	91.7	8.3	0.1	0.0	0.0	0.02	0.1	4.1
31	MEDICINE	0.1	13.8	86.2	0.2	0.2	12.8	87.2	0.2	0.0	0.1	0.09	0.7	4.9
33	ARTIST	0.1	93.3	6.7	0.1	0.1	81.8	18.2	0.1	0.0	0.0	0.04	0.3	3.9
41	CLERICAL	9.6	67.7	32.3	11.9	9.8	57.6	42.4	10.4	-0.9	1.1	0.18	1.3	0.2
51	SALES	1.3	97.4	2.6	1.6	1.0	92.3	7.7	1.1	-0.3	0.0	-0.28	-2.1	-2.4
61	SERVICE	2.2	95.4	4.6	2.7	2.1	90.3	9.7	2.2	-0.2	0.1	-0.06	-0.4	-0.3
71	FARMING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
75	FORESTRY	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	.
77	MINING	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	.
81	PROCESSING	2.0	87.3	12.7	2.4	1.8	84.5	15.5	1.9	-0.2	0.0	-0.16	-1.2	-0.8
83	MACHINING	16.7	91.6	8.4	20.6	18.0	87.0	13.0	19.1	0.4	0.9	1.36	10.2	0.8
85	FABRICATING	32.6	88.5	11.5	40.2	41.5	85.8	14.2	44.0	6.8	2.2	8.97	67.0	2.5
87	CONSTRUCTION	1.9	96.4	3.6	2.4	1.6	97.5	2.5	1.7	-0.3	-0.0	-0.34	-2.5	-1.9
91	TRANSPORTATION	1.1	99.5	0.5	1.4	0.9	98.9	1.1	0.9	-0.2	0.0	-0.22	-1.7	-2.3
93	MAT. HANDLING	3.5	87.1	12.9	4.3	4.2	84.2	15.8	4.4	0.4	0.2	0.65	4.8	1.7
95	OTHER CRAFTS	0.3	98.2	1.8	0.3	0.4	96.1	3.9	0.4	0.1	0.0	0.10	0.7	3.1
99	OTHER OCC.	4.4	86.4	13.6	5.4	3.9	80.5	19.5	4.2	-0.6	0.2	-0.43	-3.2	-1.0
	TOTAL	80.9	87.6	12.4	100.0	94.3	83.6	16.4	100.0	8.0	5.4	13.39	100.0	1.5

APPENDIX C11
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	3.8	92.1	7.9	5.7	8.4	85.5	14.5	9.0	3.7	0.9	4.60	17.7	8.3
21	NATURAL SCI.	5.9	96.0	4.0	8.8	9.4	93.4	6.6	10.1	3.1	0.4	3.50	13.5	4.8
23	SOCIAL SCI.	0.1	85.2	14.8	0.2	0.1	81.5	18.5	0.1	-0.0	0.0	0.00	0.0	0.0
27	TEACHING	0.1	58.3	41.7	0.1	0.1	92.3	7.7	0.1	0.1	-0.0	0.07	0.3	8.0
31	MEDICINE	0.1	14.3	85.7	0.1	0.1	11.1	88.9	0.1	0.0	0.0	0.02	0.1	2.5
33	ARTIST	0.2	89.1	10.9	0.3	0.3	86.2	13.8	0.3	0.1	0.0	0.10	0.4	3.5
37	SPORTS	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
41	CLERICAL	12.4	52.1	47.9	18.6	15.3	43.2	56.8	16.4	0.1	2.7	2.82	10.9	2.1
51	SALES	3.0	97.7	2.3	4.5	2.8	89.8	10.2	3.0	-0.5	0.2	-0.25	-1.0	-0.9
61	SERVICE	0.9	90.2	9.8	1.3	1.0	83.2	16.8	1.1	0.0	0.1	0.11	0.4	1.2
71	FARMING	0.0	90.0	10.0	0.1	0.1	94.1	5.9	0.1	0.0	0.0	0.03	0.1	5.4
73	FISHING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	-0.0	0.0	-0.01	-0.0	-6.7
77	MINING	0.0	66.7	33.3	0.0	0.1	86.7	13.3	0.1	0.1	0.0	0.06	0.2	17.5
81	PROCESSING	1.1	94.3	5.7	1.7	2.4	95.8	4.2	2.6	1.2	0.0	1.24	4.8	7.7
83	MACHINING	15.6	97.3	2.7	23.2	20.7	96.3	3.7	22.3	4.8	0.3	5.12	19.7	2.9
85	FABRICATING	16.5	92.6	7.4	24.6	25.2	89.7	10.3	27.1	7.3	1.4	8.69	33.5	4.3
87	CONSTRUCTION	1.7	98.0	2.0	2.6	1.8	98.1	1.9	2.0	0.1	0.0	0.10	0.4	0.6
91	TRANSPORTATION	0.6	99.1	0.9	0.8	0.6	99.2	0.8	0.7	0.1	0.0	0.06	0.2	1.0
93	MAT. HANDLING	1.7	89.5	10.5	2.6	2.1	91.6	8.4	2.2	0.4	-0.0	0.36	1.4	1.9
95	OTHER CRAFTS	0.4	93.1	6.9	0.5	0.3	90.5	9.5	0.3	-0.1	0.0	-0.04	-0.2	-1.3
99	OTHER OCC.	2.8	89.4	10.6	4.2	2.2	85.2	14.8	2.4	-0.7	0.0	-0.64	-2.5	-2.5
	TOTAL	67.0	86.5	13.5	100.0	93.0	83.7	16.3	100.0	19.8	6.1	25.95	100.0	3.3

APPENDIX C12
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	EMPLOYMENT GROWTH 71-81 FEMALE (000)	EMPLOYMENT GROWTH 71-81 TOTAL (000)	EMPLOYMENT GROWTH 71-81 % OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	3.4	91.0	9.0	4.9	7.2	86.9	13.1	8.6	3.2	0.6	3.79	27.7	7.8
21	NATURAL SCI.	7.1	94.7	5.3	10.2	9.9	91.8	8.2	11.9	2.4	0.4	2.81	20.5	3.4
23	SOCIAL SCI.	0.1	95.5	4.5	0.2	0.2	91.7	8.3	0.2	0.1	0.0	0.07	0.5	5.0
27	TEACHING	0.1	85.7	14.3	0.1	0.1	52.4	47.6	0.1	-0.0	0.0	0.04	0.3	4.1
31	MEDICINE	0.1	5.3	94.7	0.1	0.2	18.7	81.2	0.2	0.0	0.0	0.07	0.5	5.4
33	ARTIST	0.2	89.2	10.8	0.3	0.3	82.4	17.6	0.3	0.0	0.0	0.07	0.5	3.3
41	CLERICAL	12.0	45.9	54.1	17.2	12.8	35.4	64.6	15.4	-1.0	1.8	0.79	5.8	0.6
51	SALES	2.3	94.9	5.1	3.3	2.0	88.4	11.6	2.4	-0.4	0.1	-0.28	-2.0	-1.3
61	SERVICE	0.8	85.3	14.7	1.2	0.7	79.7	20.3	0.9	-0.1	0.0	-0.10	-0.7	-1.3
71	FARMING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.02	0.1	7.2
77	MINING	0.0	100.0	0.0	0.0	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.0	.
81	PROCESSING	1.6	78.0	22.0	2.4	2.7	82.1	17.9	3.2	0.9	0.1	1.04	7.6	5.0
83	MACHINING	7.9	80.8	19.2	11.3	7.8	77.8	22.2	9.4	-0.3	0.2	-0.09	-0.7	-0.1
85	FABRICATING	25.8	54.2	45.8	37.1	31.8	52.2	47.8	38.2	2.6	3.4	5.98	43.7	2.1
87	CONSTRUCTION	2.6	91.0	9.0	3.7	2.2	74.7	25.3	2.6	-0.7	0.3	-0.41	-3.0	-1.7
91	TRANSPORTATION	0.3	100.0	0.0	0.5	0.3	96.8	3.2	0.4	-0.0	0.0	-0.02	-0.1	-0.5
93	MAT. HANDLING	1.7	69.6	30.4	2.5	2.2	73.3	26.7	2.6	0.4	0.1	0.45	3.2	2.3
95	OTHER CRAFTS	0.5	82.2	17.8	0.7	0.5	75.3	24.7	0.6	-0.1	0.0	-0.02	-0.1	-0.4
99	OTHER OCC.	3.0	61.5	38.5	4.4	2.5	55.1	44.9	3.0	-0.5	-0.0	-0.51	-3.7	-1.8
	TOTAL	69.5	66.6	33.4	100.0	83.2	63.5	36.5	100.0	6.5	7.2	13.69	100.0	1.8

APPENDIX C13
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	EMPLOYMENT GROWTH 71-81 FEMALE (000)	EMPLOYMENT GROWTH 71-81 TOTAL (000)	EMPLOYMENT GROWTH 71-81 % OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	5.1	90.2	9.8	6.8	11.6	84.5	15.5	11.6	5.2	1.3	6.52	25.2	8.6
21	NATURAL SCI.	6.2	94.0	6.0	8.3	9.7	88.0	12.0	9.6	2.7	0.8	3.46	13.4	4.5
23	SOCIAL SCI.	0.2	75.0	25.0	0.3	0.5	61.3	38.7	0.5	0.1	0.1	0.26	1.0	8.8
27	TEACHING	0.0	66.7	33.3	0.1	0.2	71.0	29.0	0.2	0.1	0.0	0.11	0.4	13.2
31	MEDICINE	0.5	43.5	56.5	0.6	0.9	43.9	56.1	0.9	0.2	0.2	0.40	1.6	6.5
33	ARTIST	0.2	89.2	10.8	0.2	0.2	65.2	34.8	0.2	-0.0	0.1	0.04	0.2	2.2
41	CLERICAL	13.7	43.6	56.4	18.4	16.7	33.7	66.3	16.6	-0.4	3.3	2.94	11.4	2.0
51	SALES	5.1	91.3	8.7	6.9	4.6	84.2	15.8	4.5	-0.8	0.3	-0.55	-2.1	-1.1
61	SERVICE	1.6	84.8	15.2	2.2	1.5	76.1	23.9	1.5	-0.3	0.1	-0.15	-0.6	-1.0
71	FARMING	0.1	94.4	5.6	0.1	0.2	74.2	25.8	0.2	0.0	0.0	0.07	0.3	5.6
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.0	11.6
77	MINING	0.1	100.0	0.0	0.1	0.1	100.0	0.0	0.1	-0.0	0.0	-0.01	-0.0	-1.0
81	PROCESSING	11.9	85.4	14.6	15.9	16.2	81.7	18.3	16.1	3.1	1.2	4.30	16.7	3.1
83	MACHINING	2.3	86.5	13.5	3.0	2.5	87.5	12.5	2.5	0.3	0.0	0.26	1.0	1.1
85	FABRICATING	13.0	76.5	23.5	17.4	19.5	73.0	27.0	19.5	4.4	2.2	6.59	25.5	4.2
87	CONSTRUCTION	1.7	98.3	1.7	2.3	2.0	97.2	2.8	2.0	0.2	0.0	0.26	1.0	1.4
91	TRANSPORTATION	1.5	99.7	0.3	2.0	1.6	97.8	2.2	1.6	0.1	0.0	0.16	0.6	1.0
93	MAT. HANDLING	5.3	53.6	46.4	7.2	6.6	50.1	49.9	6.6	0.4	0.8	1.23	4.8	2.1
95	OTHER CRAFTS	1.4	92.0	8.0	1.9	1.6	89.7	10.3	1.6	0.1	0.1	0.16	0.6	1.1
99	OTHER OCC.	4.6	78.4	21.6	6.2	4.4	70.1	29.9	4.4	-0.5	0.3	-0.23	-0.9	-0.5
	TOTAL	74.5	75.3	24.7	100.0	100.4	70.8	29.2	100.0	14.9	11.0	25.84	100.0	3.0

APPENDIX C14
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	1.1	93.9	6.1	4.3	2.3	87.4	12.6	8.2	1.0	0.2	1.21	60.9	7.5
21	NATURAL SCI.	1.0	97.0	3.0	3.8	1.3	92.1	7.9	4.6	0.2	0.1	0.31	15.7	2.7
23	SOCIAL SCI.	0.0	.	.	0.0	0.0	90.0	10.0	0.2	0.0	0.0	0.05	2.5	.
27	TEACHING	0.0	50.0	50.0	0.0	0.1	23.5	76.5	0.3	0.0	0.1	0.07	3.8	23.9
31	MEDICINE	0.0	0.0	100.0	0.1	0.0	50.0	50.0	0.2	0.0	0.0	0.03	1.8	12.8
33	ARTIST	0.1	91.7	8.3	0.2	0.1	59.3	40.7	0.5	0.0	0.1	0.07	3.8	8.4
37	SPORTS	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
41	CLERICAL	3.2	48.7	51.3	12.0	3.5	38.3	61.7	12.2	-0.2	0.5	0.29	14.9	0.9
51	SALES	1.1	95.9	4.1	4.1	1.1	84.5	15.5	3.7	-0.2	0.1	-0.03	-1.8	-0.3
61	SERVICE	0.6	91.0	9.0	2.1	0.3	88.6	11.4	1.2	-0.2	-0.0	-0.20	-10.4	-4.5
71	FARMING	0.0	100.0	0.0	0.1	0.0	80.0	20.0	0.1	-0.0	0.0	-0.01	-0.5	-3.3
73	FISHING	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.3	.
77	MINING	0.2	100.0	0.0	0.6	0.2	97.1	2.9	0.6	0.0	0.0	0.02	1.0	1.2
81	PROCESSING	6.1	87.8	12.2	22.7	6.2	86.1	13.9	21.5	-0.0	0.1	0.11	5.6	0.2
83	MACHINING	2.2	95.9	4.1	8.1	2.7	89.5	10.5	9.5	0.3	0.2	0.54	27.3	2.2
85	FABRICATING	2.1	91.6	8.4	7.8	2.2	89.2	10.8	7.6	0.0	0.1	0.09	4.3	0.4
87	CONSTRUCTION	2.1	97.9	2.1	8.1	1.9	99.2	0.8	6.7	-0.2	-0.0	-0.23	-11.4	-1.1
91	TRANSPORTATION	2.4	99.2	0.8	8.9	2.5	99.0	1.0	8.6	0.1	0.0	0.08	4.3	0.4
93	MAT. HANDLING	2.4	76.4	23.6	9.0	2.5	82.1	17.9	8.8	0.2	-0.1	0.11	5.8	0.5
95	OTHER CRAFTS	0.2	91.7	8.3	0.9	0.2	84.8	15.2	0.8	-0.0	0.0	-0.01	-0.5	-0.4
99	OTHER OCC.	1.9	92.9	7.1	7.1	1.4	92.7	7.3	4.8	-0.5	-0.0	-0.54	-27.3	-3.3
	TOTAL	26.7	86.3	13.7	100.0	28.6	82.8	17.2	100.0	0.7	1.3	1.98	100.0	0.7

APPENDIX C15
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MANUFACTURING INDUSTRIES INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	2.5	88.2	11.8	5.2	4.5	79.3	20.7	7.3	1.4	0.6	2.01	14.3	6.2
21	NATURAL SCI.	1.8	94.6	5.4	3.9	2.4	86.6	13.4	3.9	0.3	0.2	0.54	3.9	2.6
23	SOCIAL SCI.	0.0	100.0	0.0	0.0	0.1	78.6	21.4	0.1	0.0	0.0	0.05	0.4	16.7
27	TEACHING	0.0	62.5	37.5	0.1	0.1	53.3	46.7	0.1	0.0	0.0	0.03	0.2	6.5
31	MEDICINE	0.9	69.6	30.4	1.8	1.6	69.9	30.1	2.6	0.5	0.2	0.74	5.3	6.4
33	ARTIST	0.7	86.3	13.7	1.5	1.1	80.1	19.9	1.8	0.2	0.1	0.35	2.5	4.0
41	CLERICAL	8.2	36.3	63.7	17.5	9.8	27.0	73.0	16.0	-0.4	1.9	1.53	11.0	1.7
51	SALES	2.8	84.4	15.6	5.9	2.6	76.9	23.1	4.3	-0.3	0.2	-0.17	-1.2	-0.6
61	SERVICE	0.7	85.2	14.8	1.4	0.7	73.5	26.5	1.1	-0.1	0.1	0.01	0.0	0.1
71	FARMING	0.0	100.0	0.0	0.1	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.0	1.8
75	FORESTRY	0.0	.	.	0.0	0.0	.	.	0.0	0.0	0.0	0.00	0.0	.
77	MINING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	11.6
81	PROCESSING	2.7	77.6	22.4	5.7	2.9	72.5	27.5	4.7	0.0	0.2	0.22	1.5	0.8
83	MACHINING	4.0	79.5	20.5	8.5	4.0	75.1	24.9	6.6	-0.2	0.2	0.01	0.0	0.0
85	FABRICATING	16.5	43.4	56.6	34.9	24.2	39.3	60.7	39.6	2.4	5.4	7.77	55.4	3.9
87	CONSTRUCTION	0.6	89.3	10.7	1.3	0.6	91.4	8.6	1.0	0.0	-0.0	0.03	0.2	0.5
91	TRANSPORTATION	0.3	88.9	11.1	0.7	0.4	90.1	9.9	0.7	0.1	0.0	0.09	0.6	2.5
93	MAT. HANDLING	1.7	35.3	64.7	3.6	2.1	33.9	66.1	3.5	0.1	0.3	0.39	2.8	2.1
95	OTHER CRAFTS	0.8	73.3	26.7	1.7	1.1	67.9	32.1	1.8	0.1	0.1	0.27	1.9	2.9
99	OTHER OCC.	2.8	54.2	45.8	6.0	2.9	51.2	48.8	4.8	-0.0	0.1	0.13	0.9	0.4
	TOTAL	47.1	57.5	42.5	100.0	61.1	51.4	48.6	100.0	4.3	9.7	14.01	100.0	2.6

APPENDIX C16
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CONSTRUCTION INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	7.8	90.8	9.2	4.1	14.4	89.6	10.4	6.5	5.8	0.8	6.56	20.3	6.3
21	NATURAL SCI.	4.4	98.9	1.1	2.3	5.0	94.0	6.0	2.2	0.3	0.2	0.57	1.8	1.2
23	SOCIAL SCI.	0.0	100.0	0.0	0.0	0.1	64.3	35.7	0.0	0.0	0.0	0.04	0.1	8.8
25	RELIGION	0.0	100.0	0.0	0.0	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.0	.
27	TEACHING	0.0	100.0	0.0	0.0	0.0	80.0	20.0	0.0	0.0	0.0	0.01	0.0	9.6
31	MEDICINE	0.0	40.0	60.0	0.0	0.0	0.0	100.0	0.0	-0.0	-0.0	-0.01	-0.0	-8.8
33	ARTIST	0.2	79.5	20.5	0.1	0.2	71.4	28.6	0.1	-0.0	0.0	0.01	0.0	0.7
37	SPORTS	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
41	CLERICAL	11.7	29.9	70.1	6.2	18.6	15.4	84.6	8.4	-0.6	7.5	6.87	21.2	4.7
51	SALES	2.5	89.8	10.2	1.3	3.0	82.0	18.0	1.3	0.2	0.3	0.52	1.6	2.0
61	SERVICE	2.1	78.6	21.4	1.1	2.1	63.0	37.0	1.0	-0.3	0.4	0.09	0.3	0.5
71	FARMING	4.3	98.5	1.5	2.2	6.9	91.6	8.4	3.1	2.1	0.5	2.63	8.1	4.9
73	FISHING	0.0	100.0	0.0	0.0	0.0	.	.	0.0	-0.0	0.0	-0.00	-0.0	.
75	FORESTRY	0.2	96.9	3.1	0.1	0.1	100.0	0.0	0.1	-0.0	-0.0	-0.02	-0.1	-1.7
77	MINING	1.3	100.0	0.0	0.7	0.8	100.0	0.0	0.3	-0.5	0.0	-0.51	-1.6	-5.0
81	PROCESSING	0.9	98.9	1.1	0.5	1.2	95.6	4.4	0.6	0.2	0.0	0.29	0.9	2.8
83	MACHINING	8.1	99.1	0.9	4.2	7.7	98.5	1.5	3.5	-0.4	0.0	-0.38	-1.2	-0.5
85	FABRICATING	5.6	98.6	1.4	3.0	8.5	97.2	2.8	3.8	2.7	0.2	2.81	8.7	4.1
87	CONSTRUCTION	123.8	99.3	0.7	65.3	140.6	98.7	1.3	63.3	15.9	0.9	16.80	51.9	1.3
91	TRANSPORTATION	6.7	99.0	1.0	3.5	6.1	98.1	1.9	2.7	-0.7	0.1	-0.65	-2.0	-1.0
93	MAT. HANDLING	3.0	98.8	1.2	1.6	2.2	97.3	2.7	1.0	-0.8	0.0	-0.80	-2.5	-3.0
95	OTHER CRAFTS	0.5	97.9	2.1	0.3	0.5	93.9	6.1	0.2	-0.0	0.0	0.01	0.0	0.1
99	OTHER OCC.	6.6	97.5	2.5	3.5	4.1	94.0	6.0	1.9	-2.6	0.1	-2.48	-7.7	-4.6
	TOTAL	189.7	94.2	5.8	100.0	222.1	90.0	10.0	100.0	21.3	11.1	32.37	100.0	1.6

APPENDIX C17
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	1.5	90.8	9.2	4.4	3.5	88.1	11.9	6.8	1.7	0.3	1.98	11.7	8.7
21	NATURAL SCI.	4.9	97.8	2.2	14.2	8.2	94.1	5.9	15.9	2.9	0.4	3.26	19.2	5.2
23	SOCIAL SCI.	0.1	57.1	42.9	0.3	0.1	75.0	25.0	0.3	0.0	-0.0	0.03	0.2	2.9
27	TEACHING	0.1	93.3	6.7	0.2	0.2	95.2	4.8	0.4	0.1	0.0	0.14	0.8	10.8
31	MEDICINE	0.0	60.0	40.0	0.1	0.0	50.0	50.0	0.1	0.0	0.0	0.01	0.0	1.8
33	ARTIST	0.1	73.3	26.7	0.2	0.1	72.2	27.8	0.2	0.0	0.0	0.01	0.1	1.8
37	SPORTS	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.1	.
41	CLERICAL	7.3	41.8	58.2	21.2	10.2	32.0	68.0	19.8	0.2	2.7	2.90	17.1	3.4
51	SALES	0.8	95.4	4.6	2.2	0.5	84.5	15.5	1.1	-0.3	0.0	-0.21	-1.2	-3.2
61	SERVICE	0.9	73.7	26.3	2.7	1.0	77.5	22.5	2.0	0.1	-0.0	0.11	0.7	1.2
71	FARMING	0.2	100.0	0.0	0.7	0.2	90.2	9.8	0.4	-0.1	0.0	-0.04	-0.2	-1.8
75	FORESTRY	0.2	98.0	2.0	0.7	0.2	97.2	2.8	0.4	-0.1	0.0	-0.07	-0.4	-3.2
77	MINING	0.1	100.0	0.0	0.2	0.1	100.0	0.0	0.1	-0.0	0.0	-0.01	-0.1	-1.5
81	PROCESSING	0.1	96.3	3.7	0.4	0.3	98.5	1.5	0.6	0.2	0.0	0.20	1.2	9.3
83	MACHINING	0.6	99.1	0.9	1.6	1.1	100.0	0.0	2.2	0.6	-0.0	0.57	3.4	7.3
85	FABRICATING	2.0	98.5	1.5	5.9	3.3	99.5	0.5	6.4	1.3	-0.0	1.25	7.4	4.9
87	CONSTRUCTION	7.5	99.5	0.5	21.9	11.1	99.1	0.9	21.6	3.5	0.1	3.55	21.0	3.9
91	TRANSPORTATION	1.3	97.7	2.3	3.8	2.0	98.5	1.5	3.9	0.7	0.0	0.71	4.2	4.4
93	MAT. HANDLING	1.2	99.6	0.4	3.6	1.8	99.2	0.8	3.6	0.6	0.0	0.59	3.5	4.0
95	OTHER CRAFTS	3.4	99.3	0.7	9.9	5.5	97.8	2.2	10.7	2.0	0.1	2.08	12.3	4.9
99	OTHER OCC.	2.0	97.5	2.5	5.8	1.9	96.5	3.5	3.6	-0.1	0.0	-0.13	-0.8	-0.7
	TOTAL	34.5	85.4	14.6	100.0	51.4	83.3	16.7	100.0	13.4	3.5	16.93	100.0	4.1

APPENDIX C18
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	3.2	89.4	10.6	2.6	8.1	83.3	16.7	5.0	3.9	1.0	4.97	12.4	9.9
21	NATURAL SCI.	2.1	97.2	2.8	1.7	2.5	91.6	8.4	1.5	0.2	0.1	0.32	0.8	1.4
23	SOCIAL SCI.	0.2	93.9	6.1	0.1	0.2	75.0	25.0	0.1	-0.0	0.0	-0.01	-0.0	-0.3
27	TEACHING	0.2	92.7	7.3	0.2	0.5	86.0	14.0	0.3	0.2	0.1	0.29	0.7	9.3
31	MEDICINE	0.3	98.1	1.9	0.2	1.0	91.8	8.2	0.6	0.6	0.1	0.71	1.8	14.1
33	ARTIST	0.1	84.6	15.4	0.1	0.1	62.5	37.5	0.0	-0.0	0.0	0.01	0.0	2.1
37	SPORTS	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.0	7.2
41	CLERICAL	19.7	57.8	42.2	16.0	29.3	40.2	59.8	18.0	0.4	9.2	9.62	24.0	4.1
51	SALES	2.0	91.5	8.5	1.6	2.5	75.1	24.9	1.5	0.0	0.4	0.49	1.2	2.2
61	SERVICE	5.3	75.7	24.3	4.3	6.8	63.2	36.8	4.2	0.3	1.2	1.46	3.6	2.5
71	FARMING	0.3	98.2	1.8	0.2	0.3	89.8	10.2	0.2	-0.0	0.0	0.01	0.0	0.3
75	FORESTRY	0.1	100.0	0.0	0.1	0.0	100.0	0.0	0.0	-0.0	0.0	-0.04	-0.1	-5.7
77	MINING	0.0	100.0	0.0	0.0	0.1	100.0	0.0	0.0	0.0	0.0	0.01	0.0	1.0
81	PROCESSING	0.4	93.4	6.6	0.3	0.4	90.2	9.8	0.3	0.0	0.0	0.03	0.1	0.8
83	MACHINING	1.1	98.6	1.4	0.9	1.1	99.1	0.9	0.7	0.0	-0.0	0.02	0.1	0.2
85	FABRICATING	9.0	99.6	0.4	7.3	11.7	99.0	1.0	7.2	2.6	0.1	2.72	6.8	2.7
87	CONSTRUCTION	8.7	99.4	0.6	7.0	10.3	99.3	0.7	6.4	1.7	0.0	1.70	4.2	1.8
91	TRANSPORTATION	58.8	95.7	4.3	47.9	75.1	89.2	10.8	46.1	10.7	5.6	16.30	40.7	2.5
93	MAT. HANDLING	6.6	96.9	3.1	5.4	8.9	95.6	4.4	5.4	2.1	0.2	2.24	5.6	3.0
95	OTHER CRAFTS	1.0	97.0	3.0	0.8	0.8	95.6	4.4	0.5	-0.2	0.0	-0.20	-0.5	-2.3
99	OTHER OCC.	3.8	94.9	5.1	3.1	3.3	92.9	7.1	2.0	-0.6	0.0	-0.58	-1.4	-1.6
	TOTAL	122.8	89.2	10.8	100.0	162.9	80.7	19.3	100.0	21.9	18.2	40.08	100.0	2.9

APPENDIX C19
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNICATION INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	3.2	71.3	28.7	5.9	8.4	66.2	33.8	10.1	3.3	1.9	5.19	18.2	10.0
21	NATURAL SCI.	2.3	94.5	5.5	4.2	4.2	81.6	18.4	5.1	1.3	0.6	1.95	6.8	6.4
23	SOCIAL SCI.	0.2	55.9	44.1	0.3	0.5	58.1	41.9	0.6	0.2	0.1	0.29	1.0	10.6
25	RELIGION	0.0	.	.	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.00	0.0	.
27	TEACHING	0.2	39.6	60.4	0.4	0.3	46.4	53.6	0.4	0.1	0.0	0.11	0.4	3.7
31	MEDICINE	0.0	0.0	100.0	0.0	0.1	35.7	64.3	0.1	0.0	0.0	0.05	0.2	13.3
33	ARTIST	3.2	82.2	17.8	5.9	6.1	74.8	25.2	7.3	1.9	1.0	2.85	10.0	6.6
37	SPORTS	0.0	.	.	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.01	0.0	.
41	CLERICAL	32.0	45.0	55.0	58.6	43.0	38.6	61.4	51.8	2.2	8.8	11.04	38.7	3.0
51	SALES	1.0	79.3	20.7	1.8	2.0	56.6	43.4	2.4	0.3	0.7	0.98	3.4	7.1
61	SERVICE	0.8	56.4	43.6	1.5	1.0	56.3	43.7	1.2	0.1	0.1	0.16	0.6	1.8
71	FARMING	0.0	100.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.01	0.0	11.6
81	PROCESSING	0.0	100.0	0.0	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.03	0.1	14.9
83	MACHINING	0.1	93.3	6.7	0.1	0.1	90.9	9.1	0.1	0.0	0.0	0.04	0.1	3.9
85	FABRICATING	1.1	95.0	5.0	2.0	2.0	92.3	7.7	2.4	0.8	0.1	0.91	3.2	6.2
87	CONSTRUCTION	7.0	99.4	0.6	12.9	11.2	95.2	4.8	13.5	3.7	0.5	4.16	14.6	4.8
91	TRANSPORTATION	0.4	94.4	5.6	0.8	0.4	91.1	8.9	0.5	-0.0	0.0	0.00	0.0	0.0
93	MAT. HANDLING	1.0	92.2	7.8	1.8	0.9	94.1	5.9	1.1	0.0	-0.0	-0.02	-0.1	-0.2
95	OTHER CRAFTS	1.2	92.3	7.7	2.2	1.9	80.0	20.0	2.3	0.4	0.3	0.70	2.5	4.8
99	OTHER OCC.	0.8	72.2	27.8	1.4	0.9	63.2	36.8	1.0	-0.0	0.1	0.07	0.2	0.8
	TOTAL	54.5	62.4	37.6	100.0	83.1	58.1	41.9	100.0	14.3	14.3	28.53	100.0	4.3

APPENDIX C20
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRADE INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	15.6	83.2	16.8	3.3	38.8	75.3	24.7	5.7	16.2	7.0	23.20	10.8	9.5
21	NATURAL SCI.	2.5	92.6	7.4	0.5	6.1	83.9	16.1	0.9	2.8	0.8	3.63	1.7	9.4
23	SOCIAL SCI.	0.3	77.6	22.4	0.1	0.8	61.1	38.9	0.1	0.3	0.2	0.50	0.2	10.5
25	RELIGION	0.0	66.7	33.3	0.0	0.0	71.4	28.6	0.0	0.0	0.0	0.02	0.0	8.8
27	TEACHING	0.2	58.7	41.3	0.0	1.0	40.7	59.3	0.1	0.3	0.5	0.74	0.3	15.5
31	MEDICINE	3.6	76.7	23.3	0.8	7.1	47.1	52.9	1.0	0.6	2.9	3.52	1.6	7.1
33	ARTIST	2.6	45.2	54.8	0.6	4.5	32.8	67.2	0.7	0.3	1.6	1.86	0.9	5.5
37	SPORTS	0.1	100.0	0.0	0.0	0.1	92.0	8.0	0.0	0.0	0.0	0.05	0.0	6.0
41	CLERICAL	103.5	27.0	73.0	22.1	169.9	24.7	75.3	24.9	14.0	52.4	66.38	31.0	5.1
51	SALES	202.3	61.4	38.6	43.3	274.8	53.0	47.0	40.3	21.5	50.9	72.45	33.8	3.1
61	SERVICE	13.5	46.8	53.2	2.9	17.0	46.4	53.6	2.5	1.5	1.9	3.44	1.6	2.3
71	FARMING	1.7	62.6	37.4	0.4	1.6	59.3	40.7	0.2	-0.1	0.0	-0.13	-0.1	-0.8
73	FISHING	0.0	100.0	0.0	0.0	0.1	63.6	36.4	0.0	0.0	0.0	0.02	0.0	4.6
75	FORESTRY	0.1	100.0	0.0	0.0	0.1	96.3	3.7	0.0	0.0	0.0	0.01	0.0	1.2
77	MINING	0.1	91.7	8.3	0.0	0.1	100.0	0.0	0.0	0.0	-0.0	0.00	0.0	0.0
81	PROCESSING	8.7	86.1	13.9	1.9	13.5	80.3	19.7	2.0	3.4	1.5	4.83	2.3	4.5
83	MACHINING	4.5	94.5	5.5	1.0	6.0	90.0	10.0	0.9	1.1	0.3	1.42	0.7	2.7
85	FABRICATING	55.7	91.0	9.0	11.9	77.7	89.8	10.2	11.4	19.1	2.9	21.95	10.2	3.4
87	CONSTRUCTION	4.4	98.6	1.4	0.9	5.9	94.3	5.7	0.9	1.3	0.3	1.55	0.7	3.1
91	TRANSPORTATION	15.7	97.7	2.3	3.4	20.4	96.0	4.0	3.0	4.2	0.5	4.68	2.2	2.6
93	MAT. HANDLING	15.9	75.3	24.7	3.4	19.0	72.1	27.9	2.8	1.7	1.4	3.11	1.5	1.8
95	OTHER CRAFTS	1.2	76.8	23.2	0.3	1.7	70.0	30.0	0.2	0.2	0.2	0.42	0.2	2.9
99	OTHER OCC.	15.2	78.4	21.6	3.2	16.0	80.2	19.8	2.3	0.9	-0.1	0.79	0.4	0.5
	TOTAL	467.6	61.2	38.8	100.0	682.1	55.1	44.9	100.0	89.4	125.1	214.47	100.0	3.8

APPENDIX C21
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	18.8	81.4	18.6	12.6	41.4	65.1	34.9	16.9	11.7	11.0	22.67	23.5	8.2
21	NATURAL SCI.	2.9	84.7	15.3	1.9	7.0	68.8	31.2	2.8	2.4	1.7	4.10	4.2	9.3
23	SOCIAL SCI.	0.6	73.8	26.2	0.4	1.2	59.4	40.6	0.5	0.3	0.3	0.59	0.6	6.7
27	TEACHING	0.1	65.0	35.0	0.1	0.3	40.9	59.1	0.1	0.1	0.2	0.23	0.2	12.7
31	MEDICINE	0.2	22.0	78.0	0.1	0.2	21.7	78.3	0.1	0.0	0.0	0.02	0.0	1.2
33	ARTIST	0.3	51.6	48.4	0.2	0.7	32.4	67.6	0.3	0.1	0.3	0.37	0.4	8.1
37	SPORTS	0.0	50.0	50.0	0.0	0.0	33.3	66.7	0.0	0.0	0.0	0.02	0.0	11.6
41	CLERICAL	75.1	16.0	84.0	50.4	118.2	11.0	89.0	48.1	1.0	42.1	43.11	44.6	4.6
51	SALES	36.0	84.1	15.9	24.1	57.7	65.4	34.6	23.5	7.4	14.3	21.68	22.4	4.8
61	SERVICE	7.9	58.0	42.0	5.3	11.3	56.0	44.0	4.6	1.8	1.7	3.46	3.6	3.7
71	FARMING	0.3	100.0	0.0	0.2	0.6	94.9	5.1	0.2	0.2	0.0	0.26	0.3	5.8
75	FORESTRY	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	-0.0	0.0	0.00	0.0	0.0
77	MINING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	-0.0	0.0	-0.02	-0.0	-6.7
81	PROCESSING	0.3	86.7	13.3	0.2	0.2	87.8	12.2	0.1	-0.1	-0.0	-0.10	-0.1	-3.7
83	MACHINING	0.6	89.4	10.6	0.4	0.2	94.4	5.6	0.1	-0.3	-0.1	-0.38	-0.4	-10.8
85	FABRICATING	0.8	76.9	23.1	0.5	0.9	74.6	25.4	0.4	0.1	0.1	0.13	0.1	1.5
87	CONSTRUCTION	1.2	99.1	0.9	0.8	1.6	95.1	4.9	0.7	0.4	0.1	0.47	0.5	3.4
91	TRANSPORTATION	0.3	100.0	0.0	0.2	0.4	85.1	14.9	0.2	-0.0	0.1	0.04	0.0	1.2
93	MAT. HANDLING	0.3	85.1	14.9	0.2	0.2	80.0	20.0	0.1	-0.1	-0.0	-0.13	-0.1	-5.0
95	OTHER CRAFTS	0.7	90.9	9.1	0.5	0.8	84.9	15.1	0.3	0.1	0.1	0.12	0.1	1.5
99	OTHER OCC.	2.6	66.3	33.7	1.8	2.6	68.3	31.7	1.1	0.1	-0.0	0.03	0.0	0.1
	TOTAL	149.1	47.8	52.2	100.0	245.8	39.1	60.9	100.0	24.9	71.8	96.67	100.0	5.1

APPENDIX C22
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNITIES, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	37.4	75.9	24.1	5.0	73.9	64.7	35.3	6.3	19.4	17.0	36.45	8.7	7.0
21	NATURAL SCI.	22.8	88.3	11.7	3.1	45.2	84.8	15.2	3.9	18.2	4.2	22.39	5.4	7.1
23	SOCIAL SCI.	21.6	58.3	41.7	2.9	51.1	44.2	55.8	4.4	9.9	19.5	29.45	7.0	9.0
25	RELIGION	7.1	89.0	11.0	0.9	9.1	84.0	16.0	0.8	1.3	0.7	2.02	0.5	2.5
27	TEACHING	122.2	40.0	60.0	16.4	160.5	40.9	59.1	13.8	16.7	21.5	38.21	9.1	2.8
31	MEDICINE	109.2	21.5	78.5	14.6	156.6	18.5	81.5	13.4	5.5	41.9	47.39	11.3	3.7
33	ARTIST	11.1	73.4	26.6	1.5	26.7	62.5	37.5	2.3	8.5	7.1	15.57	3.7	9.1
37	SPORTS	4.1	70.8	29.2	0.6	8.2	55.0	45.0	0.7	1.6	2.5	4.09	1.0	7.1
41	CLERICAL	113.7	14.0	86.0	15.2	190.2	11.4	88.6	16.3	5.7	70.7	76.49	18.3	5.3
51	SALES	14.0	62.8	37.2	1.9	21.3	52.9	47.1	1.8	2.5	4.8	7.25	1.7	4.3
61	SERVICE	224.2	41.2	58.8	30.0	339.5	39.6	60.4	29.1	41.9	73.3	115.28	27.6	4.2
71	FARMING	6.7	93.9	6.1	0.9	7.6	85.8	14.2	0.7	0.3	0.7	0.94	0.2	1.3
73	FISHING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
75	FORESTRY	0.1	100.0	0.0	0.0	0.1	80.0	20.0	0.0	0.0	0.0	0.01	0.0	2.3
77	MINING	0.1	91.7	8.3	0.0	0.1	100.0	0.0	0.0	0.0	-0.0	0.03	0.0	4.7
81	PROCESSING	1.9	62.0	38.0	0.3	3.4	58.5	41.5	0.3	0.8	0.7	1.49	0.4	5.9
83	MACHINING	3.7	94.4	5.6	0.5	5.4	94.0	6.0	0.5	1.6	0.1	1.68	0.4	3.8
85	FABRICATING	9.5	71.1	28.9	1.3	16.6	75.4	24.6	1.4	5.8	1.3	7.12	1.7	5.7
87	CONSTRUCTION	6.4	99.1	0.9	0.9	8.0	97.6	2.4	0.7	1.4	0.1	1.58	0.4	2.2
91	TRANSPORTATION	5.7	91.1	8.9	0.8	11.2	84.8	15.2	1.0	4.4	1.2	5.59	1.3	7.1
93	MAT. HANDLING	1.7	76.2	23.8	0.2	3.0	61.7	38.3	0.3	0.6	0.7	1.31	0.3	5.9
95	OTHER CRAFTS	5.1	83.3	16.7	0.7	7.9	72.6	27.4	0.7	1.5	1.3	2.77	0.7	4.4
99	OTHER OCC.	18.8	64.6	35.4	2.5	20.0	68.9	31.1	1.7	1.7	-0.4	1.23	0.3	0.6
	TOTAL	747.2	42.2	57.8	100.0	1165.6	39.8	60.2	100.0	149.4	269.0	418.35	100.0	4.5

APPENDIX C23
EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO, 1971 - 1981

OCC CODE	OCCUPATION	EMPLOYED LABOUR FORCE 1971 TOTAL NO. (000)	1971 % MALE	1971 % FEMALE	1971 % OF TOTAL	EMPLOYED LABOUR FORCE 1981 TOTAL NO. (000)	1981 % MALE	1981 % FEM.	1981 % OF TOTAL	EMPLOYMENT GROWTH 71-81 MALE (000)	FEMALE (000)	TOTAL (000)	% OF TOTAL	% COMPD. GROWTH RATE
11	MAN. & ADMIN.	30.0	87.3	12.7	12.5	49.2	74.1	25.9	17.0	10.4	8.9	19.28	38.3	5.1
21	NATURAL SCI.	18.9	91.4	8.6	7.9	24.1	84.2	15.8	8.3	3.0	2.2	5.16	10.2	2.4
23	SOCIAL SCI.	6.9	68.2	31.8	2.9	13.0	55.9	44.1	4.5	2.6	3.6	6.15	12.2	6.6
25	RELIGION	0.1	93.3	6.7	0.0	0.1	82.4	17.6	0.0	0.0	0.0	0.01	0.0	1.3
27	TEACHING	2.4	52.9	47.1	1.0	2.8	59.6	40.4	1.0	0.4	-0.0	0.36	0.7	1.4
31	MEDICINE	4.5	35.6	64.4	1.9	4.1	34.9	65.1	1.4	-0.2	-0.3	-0.46	-0.9	-1.1
33	ARTIST	1.8	70.6	29.4	0.8	2.8	52.7	47.3	1.0	0.2	0.8	1.00	2.0	4.5
37	SPORTS	0.9	71.6	28.4	0.4	1.7	42.7	57.3	0.6	0.1	0.7	0.79	1.6	6.6
41	CLERICAL	71.1	30.3	69.7	29.7	86.5	22.5	77.5	29.9	-2.1	17.5	15.39	30.6	2.0
51	SALES	1.3	69.7	30.3	0.5	0.8	49.7	50.3	0.3	-0.5	0.0	-0.43	-0.9	-4.1
61	SERVICE	59.0	92.1	7.9	24.7	67.6	85.5	14.5	23.3	3.4	5.1	8.55	17.0	1.4
71	FARMING	4.1	96.2	3.8	1.7	5.1	88.3	11.7	1.8	0.5	0.4	0.99	2.0	2.2
73	FISHING	0.1	78.6	21.4	0.0	0.0	66.7	33.3	0.0	-0.0	-0.0	-0.04	-0.1	-8.1
75	FORESTRY	3.0	91.1	8.9	1.2	0.5	81.3	18.7	0.2	-2.3	-0.2	-2.44	-4.8	-15.8
77	MINING	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0
81	PROCESSING	0.3	90.2	9.8	0.1	0.4	73.3	26.7	0.2	0.1	0.1	0.14	0.3	4.0
83	MACHINING	0.8	97.5	2.5	0.3	0.6	98.2	1.8	0.2	-0.2	-0.0	-0.22	-0.4	-3.2
85	FABRICATING	4.0	95.9	4.1	1.7	4.7	95.7	4.3	1.6	0.7	0.0	0.70	1.4	1.6
87	CONSTRUCTION	8.9	99.5	0.5	3.7	7.7	98.4	1.6	2.7	-1.3	0.1	-1.23	-2.4	-1.5
91	TRANSPORTATION	5.1	98.9	1.1	2.2	5.2	94.4	5.6	1.8	-0.2	0.2	0.01	0.0	0.0
93	MAT. HANDLING	1.9	98.7	1.3	0.8	1.3	93.1	6.9	0.4	-0.6	0.1	-0.57	-1.1	-3.6
95	OTHER CRAFTS	3.5	93.8	6.2	1.5	3.2	83.2	16.8	1.1	-0.6	0.3	-0.26	-0.5	-0.8
99	OTHER OCC.	10.6	88.8	11.2	4.4	8.0	82.1	17.9	2.8	-2.8	0.3	-2.53	-5.0	-2.7
	TOTAL	239.1	71.0	29.0	100.0	289.5	62.3	37.7	100.0	10.5	39.9	50.37	100.0	1.9

APPENDIX D1
SUMMARY OF 4-DIGIT OCCUPATIONS THAT GAINED IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
11	MAN. & ADMIN.		
1119	GOVT OFFICIALS. UNIQ	GAIN	23
1131	MANAGERS:NATURAL SCI	GAIN	4,9,11,12,13,15,17,19
1134	ADMINS MEDICINE	GAIN	22
1135	MGRS: FINANCIAL	GAIN	5,9,13,20,21,23
1136	PERSONNEL MGMT OCCS	GAIN	8,10,11,12,13,17,19,23
1137	SALES MGMT OCCS	GAIN	5,6,7,8,9,10,11,12,13,14,15,16,18,19,20,21,22
1141	PURCHASING MGMT OCCS	GAIN	9,10,11
1142	SERVICES MGMT OCCS	GAIN	10,22
1143	PRODUCTION MGMT OCCS	GAIN	5,6,7,8,9,10,11,12,13,14,15,18,19,20
1145	MGMT OCCS:CONSTR	GAIN	16
1147	MGMT OCCS:TRANSPORT	GAIN	18,19
1149	MGMT: NEC	GAIN	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
21	NATURAL SCI.		
2111	CHEMISTS	GAIN	13
2112	GEOLOGISTS	GAIN	4
2133	BIOLOGISTS	GAIN	23
2135	LIFE SCIENCES TECHN	GAIN	2
2151	METALLURGICAL ENG	GAIN	9
2153	MINING ENGINEERS	GAIN	4
2155	AEROSPACE ENGINEERS	GAIN	11
2159	PROFESSIONAL ENG: NEC	GAIN	22,23
2160	SUPERVISORS:ARCH. ENG	GAIN	11,17,22
23	SOCIAL SCI.		
2331	SOCIAL WORKERS	GAIN	22,23
2339	SOCIAL WORK OCCS:NEC	GAIN	22,23
2399	OCCS IN SOC SCI:NEC	GAIN	22
27	TEACHING		
2719	UNIV TEACHING:NEC	GAIN	22
2739	ELEM.SEC.TEACHERS:NEC	GAIN	22
2791	COMM.COLL.TEACHERS	GAIN	22
2795	SPECIAL ED.TEACHERS:NEC	GAIN	22
31	MEDICINE		
3131	NURSE.GRAD.NONSUPER	GAIN	22
3156	MED LAB TECHN	GAIN	22
3157	DENTURISTS	GAIN	22
3159	MED OCCS:NEC	GAIN	1
33	ARTIST		
3311	PAINTERS & SCULPTORS	GAIN	22
3314	ADVERT.ILLUSTR ART	GAIN	8,22
3330	PROD:PERFOM ARTS	GAIN	19,22
3337	RADIO & TV ANNOUNCER	GAIN	19
3339	OCCS PERF ARTS:NEC	GAIN	22
41	CLERICAL		

APPENDIX D1
SUMMARY OF 4-DIGIT OCCUPATIONS THAT GAINED IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
4130	SUPERV:BOOKKEEPING	GAIN	5,21
4133	CASHIERS & TELLERS	GAIN	1,5,20,21,22
4135	FINANCE CLERKS	GAIN	21
4137	STATISTICAL CLERKS	GAIN	23
4143	EDP EQUIP OPERATORS	GAIN	4,5,6,7,8,9,10,11,12,13,14,15,17,18,19,20,21,22,23
4150	SUPERV:RECORD.SCHED	GAIN	5,8,10,11,12,14
4172	MAIL CARRIERS	GAIN	19
4173	MAIL & POSTAL CLERKS	GAIN	19
4179	INFORMATION OCCS:NEC	GAIN	6
4193	TRAVEL CLERKS	GAIN	18
4195	PERSONNEL CLERKS	GAIN	23
51	SALES		
5131	TECHNICAL SALESMEN	GAIN	13
5133	COMMERCIAL TRAVELLER	GAIN	5,8,13,20
5149	SALES OCCS.COM:NEC	GAIN	8
5172	REAL ESTATE SALES	GAIN	21
5174	ADVERTISING SALES	GAIN	8
5177	BUSINESS SERV SALES	GAIN	8
61	SERVICE		
6111	FIRE-FIGHTING	GAIN	23
6112	POLICE OFFICERS:GOVT	GAIN	23
6115	GUARDS & OTH.SEC	GAIN	21,22,23
6119	PROTECTIVE SERV:NEC	GAIN	23
6120	SUPERV:FOOD.BEV PREP	GAIN	22
6121	CHEFS & COOKS	GAIN	22
6125	WAITERS	GAIN	22
6129	FOOD & BEV PREP:NEC	GAIN	22
6130	SUPERV:ACCOMMODATION	GAIN	21
6147	CHILD CARE OCCS	GAIN	22
6190	SUPERV:OTHER SERV	GAIN	21
6198	LABOUR SERVICES	GAIN	22
71	FARMING		
7112	FARMERS	GAIN	1
7131	FARM MGMT	GAIN	1
7180	SUPERV FARMING	GAIN	1
7195	NURSERY WORKERS	GAIN	1,16
7197	FARM MACH OPERATOR	GAIN	1
75	FORESTRY		
7510	SUPERV FORESTRY & LOG	GAIN	2
7511	FORESTRY CONSERV	GAIN	2
7517	LOG HOISTING	GAIN	2
77	MINING		
7710	SUPERV MINING	GAIN	4
7717	MINING:CUTTING	GAIN	4
7718	LABOUR:MINING	GAIN	4

APPENDIX D1
SUMMARY OF 4-DIGIT OCCUPATIONS THAT GAINED IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
81	PROCESSING		
8141	METAL EXTRUDING	GAIN	12
8146	INSPECTING:METAL PRO	GAIN	9
8148	LABOUR:METAL PROCESS	GAIN	9
8149	METAL PROCESSING:NEC	GAIN	7,9,12,15
8150	SUPERV GLASS.STONE	GAIN	14
8153	SEPARATING:GLASS	GAIN	14
8155	FORMING:GLASS	GAIN	14
8158	LABOUR:GLASS	GAIN	14
8161	MIXING:CHEMICALS	GAIN	13,15
8165	DISTILLING:CHEMICALS	GAIN	13
8176	INSPECTING:CHEMICALS	GAIN	13
8211	FLOUR & GRAIN MILL	CAIN	5
8213	BAKING	GAIN	5
8215	SLAUGHTERING	GAIN	5
8226	INSPECTING:FOOD.BEV	GAIN	5
8227	BEVERAGE PROCESSING	GAIN	5
8229	FOOD & BEV:NEC	GAIN	5
8230	SUPERV WOOD PROCESS	GAIN	7
8233	PLYWOOD MAKING	GAIN	7
8235	WOOD TREATING	GAIN	7
8239	WOOD PROCESSING:NEC	GAIN	7
8253	PAPERMAKING	GAIN	8
8258	LABOUR:PULP & PAPER	GAIN	8
8259	PULP & PAPER:NEC	GAIN	8
8263	TEXTILE SPINNING	GAIN	6
8271	KNITTING	GAIN	6
8275	TEXTILE FINISHING	GAIN	6
8276	INSPECTING:TEXTILE	GAIN	6
8278	LABOUR:TEXTILE PROC	GAIN	6
8279	TEXTILE PROC:NEC	GAIN	6
8296	INSPECTING:PROC.NEC	GAIN	15
83	MACHINING		
8330	SUPERV METAL SHAPE	GAIN	9,10
8333	SHEETMETAL WORKERS	GAIN	9,10,11,12,15
8339	METAL SHAPING:NEC	GAIN	12
8353	WOOD SAWING	GAIN	7
8357	WOOD SANDING	GAIN	7
8370	SUPERV GLASS MACH	GAIN	14
8371	CUTTING.SHAPING:GLAS	GAIN	14
8373	ABRADING:GLASS.CLAY	GAIN	14,15
8376	INSPECT:GLASS MACH	GAIN	14
8379	GLASS.CLAY MACH:NEC	GAIN	14
8395	PATTERNMAKERS:NEC	GAIN	15
85	FABRICATING		
8510	SUPERV FAB.ASSEMB:NEC	GAIN	10,11
8511	ENGINE FAB.ASSM:NEC	GAIN	10
8513	AUTO FAB.ASSM:NEC	GAIN	10
8523	IND MACH FAB.ASSM:NEC	GAIN	11

APPENDIX D1
SUMMARY OF 4-DIGIT OCCUPATIONS THAT GAINED IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
8526	INSPECTING:MET PROD:NEC	GAIN	10,11
8527	PRECISION INST FAB:NEC	GAIN	15
8529	OTHER MET PROD:NEC	GAIN	9
8533	ELEC EQUIP REPAIR:NEC	GAIN	5,8,9,10,11,16,17,18
8534	ELECTRONIC EQUIP FAB	GAIN	12
8535	ELECTRONIC OCCS:NEC	GAIN	12
8536	INSPECTING:ELEC EQ	GAIN	12
8540	SUPERV WOOD PRODUCT	GAIN	7
8541	CABINET MAKERS	GAIN	7,16
8549	FAB WOOD PRODUCT:NEC	GAIN	7
8550	SUPERV TEX,LTHR,FUR	GAIN	6
8561	SHOEMAKING,REPAIRING	GAIN	15
8566	INSPECT:TEX,LTHR,FUR	GAIN	6
8570	SUPERV RUB,PLASTIC	GAIN	13
8573	MOULDING:RUB,PLASTIC	GAIN	13
8576	INSPECT:RUB.PLASTIC	GAIN	13
8578	LABOUR:RUBBER.PLASTIC	GAIN	13
8579	FAB RUBBER.PLAST:NEC	GAIN	8,13
8582	AIRCRAFT MECHANICS	GAIN	18
8591	JEWELLERY FAB & REP	GAIN	15
8592	MARINE CRAFT FAB	GAIN	11
8595	PAINTING. DECORATING	GAIN	7,11,14,20
87	CONSTRUCTION		
8711	EXCAVATING.GRADING	GAIN	4,16,18
8713	PAVING.SURFACING	GAIN	16
8715	RAILWAY SECTIONMEN	GAIN	18
8731	POWER LINEWORKERS	GAIN	17,19
8735	WIRE COMMUNICATIONS	GAIN	19
8786	INSULATING	GAIN	16
8787	ROOFING	GAIN	16
8795	GLAZIERS	GAIN	14
8796	INSPECTING:CONSTR	GAIN	18
8799	OTHER CONSTR:NEC	GAIN	14,16,18
91	TRANSPORTATION		
9111	AIR PILOT.ETC	GAIN	18
9170	SUPERV:MOTOR TRANS	GAIN	18
9171	BUS DRIVERS	GAIN	18
9179	MOTOR TRANS:NEC	GAIN	18
93	MAT. HANDLING		
9315	MAT-HANDLING EQ OP:NEC	GAIN	5,7,9,13,14,18
9319	OTHER MAT-HAND:NEC	GAIN	9,13,14
95	OTHER CRAFTS		
9512	PRINTING PRESS OCCS	GAIN	8
9515	PHOTOENGRAVING	GAIN	8
9517	BOOKBINDING	GAIN	8
9518	LABOUR:PRINTING	GAIN	8
9519	PRINTING:NEC	GAIN	8
9531	POWER STATION OP	GAIN	17
9539	UTILITIES EQ OP:NEC	GAIN	17
9591	PHOTOGRAPHIC PROCESS	GAIN	8

APPENDIX D2
SUMMARY OF 4-DIGIT OCCUPATIONS THAT LOST IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
11	MAN. & ADMIN.		
1113	GOVT. ADMINISTRATORS	LOSS	23
1115	POSTMASTERS	LOSS	19
1116	GOVT INSPECTORS	LOSS	23
1133	ADMINS TEACHING	LOSS	22
1174	PERSONNEL & REL OFF.	LOSS	4,10,17,22,23
1175	PURCHASING OFFICERS	LOSS	5,6,7,9,10,11,12,13,17
1176	INSPECTORS:NON GOVT	LOSS	18
1179	OCCS IN MGMT:NEC	LOSS	5,6,7,8,10,11,12,13,15,17,18,19,20,21,22,23
21	NATURAL SCI.		
2119	OCCS PHYS SCI:NEC	LOSS	4
2131	AGRICULTURALISTS	LOSS	2,23
2142	CHEMICAL ENGINEERS	LOSS	13
2169	OTHER OCCS:ARCH. ENG	LOSS	23
2181	MATH. STAT.ACTUARIES	LOSS	21
23	SOCIAL SCI.		
2311	ECONOMISTS	LOSS	23
2315	PSYCHOLOGISTS	LOSS	22
2341	JUDGES & MAGISTRATES	LOSS	23
27	TEACHING		
2711	UNIVERSITY TEACHERS	LOSS	22
2731	ELEM.& KIND.TEACHERS	LOSS	22
2733	SECONDARY TEACHERS	LOSS	22
2793	POSTSEC.TEACHER:NEC	LOSS	22
31	MEDICINE		
3111	PHYSICIANS & SURG	LOSS	22
3115	VETERINARIANS	LOSS	1
3134	NURSING ASSISTANTS	LOSS	22
3135	NURSING ATTENDANTS	LOSS	22
33	ARTIST		
3313	DESIGNERS	LOSS	22
3315	PHOTO & CAMERA OPERATORS	LOSS	8,19,22
3332	MUSICIANS & SINGERS	LOSS	22
41	CLERICAL		
4113	TYPISTS & CLERK-TYP	LOSS	4,5,7,8,10,11,12,13,15,17,21,22,23
4141	OFF MACH OPERATORS	LOSS	9
4161	LIB & FILE CLERKS	LOSS	22
4170	SUPERV:RECEPT MAIL DISTR	LOSS	19
4175	TELEPHONE OPERATORS	LOSS	19
4190	SUPERV:CLERICAL:NEC	LOSS	5,6,8,9,10,11,12,13,15,16,17,18,23
4199	OTHER CLERICAL:NEC	LOSS	8,9,10,17,19,23
51	SALES		
5130	SUPERV:SALES,COM	LOSS	5,8,13,20

APPENDIX D2
SUMMARY OF 4-DIGIT OCCUPATIONS THAT LOST IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
5170	SUPERV:SALES.SERV	LOSS	21
5171	INSURANCE SALES	LOSS	21
5173	SALES:SECURITIES	LOSS	21
5193	ROUTE DRIVERS	LOSS	5
61	SERVICE		
6116	CO:ARMED FORCES	LOSS	23
6117	OTHER:ARMED FORCES	LOSS	23
6143	HAIRDRESSERS	LOSS	22
6191	JANITORS	LOSS	21,22,23
71	FARMING		
7182	FARM OCCS:NEC	LOSS	1
75	FORESTRY		
7513	TIMBER CUTTING	LOSS	2
7518	LABOUR:FORESTRY	LOSS	2
7519	FORESTRY.LOGGING:NEC	LOSS	2
77	MINING		
7713	ROCK SOIL DRILLING	LOSS	4
7715	BLASTING OCCS	LOSS	4
7719	MINING:NEC	LOSS	4
81	PROCESSING		
8130	SUPERV METAL PROCES	LOSS	9,12
8131	METAL SMELTING	LOSS	9
8135	METAL ROLLING	LOSS	9
8143	METAL PLATING	LOSS	12
8151	FURNACEMEN:GLASS	LOSS	14
8156	INSPECTING:GLASS	LOSS	14
8159	CLAY.GLASS.STONE:NEC	LOSS	14
8160	SUPERV CHEMICALS	LOSS	13
8178	LABOUR:CHEMICALS	LOSS	13
8210	SUPERV FOOD & BEV	LOSS	5
8223	MILK PROCESSING	LOSS	5
8228	LABOUR:FOOD & BEV	LOSS	5
8231	SAWMILL SAWYERS	LOSS	7
8236	INSPECTING:WOOD	LOSS	7
8238	LABOUR:WOOD	LOSS	7
8250	SUPERV PULP & PAPER	LOSS	8
8251	CELLULOSE PULP PREP	LOSS	8
8256	INSPECT:PULP & PAPER	LOSS	8
8260	SUPERV TEXTILE PROC	LOSS	6
8261	TEXTILE PREPARING	LOSS	6
8265	TEXTILE WINDING	LOSS	6
8267	TEXTILE WEAVING	LOSS	6
8295	HIDE & PELT PROCESS	LOSS	15
8298	LABOUR:PROCES.NEC	LOSS	15
83	MACHINING		

APPENDIX D2
SUMMARY OF 4-DIGIT OCCUPATIONS THAT LOST IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
8310	SUPERV METAL MACH	LOSS	9
8315	MACHINE TOOL OP	LOSS	9,10,11,12,15
8316	INSPECT:METAL MACH	LOSS	10
8350	SUPERV WOOD MACH	LOSS	7
8355	WOOD MACHINING	LOSS	7
8393	FILING.GRINDING:NEC	LOSS	10,15
	85 FABRICATING		
8515	AIRCRAFT FAB.ASSM:NEC	LOSS	11
8530	SUPERV ELEC FAB,ASSM	LOSS	12
8531	ELEC EQUIP FAB,ASSM	LOSS	12
8551	PAT-MKING:TEX,LTH,FUR	LOSS	6,15
8562	UPHOLSTERERS	LOSS	7
8563	SEWING MACHINE OCCS	LOSS	6,7,15
8571	BONDING & CEMENTING	LOSS	13
8583	RAIL MECHANICS	LOSS	18
8585	BUSINESS MACH REPAIR	LOSS	11
8587	WATCH REPAIRERS	LOSS	17
8589	OTHER MECHANICS:NEC	LOSS	5,14,17
8590	SUPERV:PROD FAB	LOSS	8,15
8593	PAPER PROD FAB	LOSS	8
8598	LABOUR:PROD FAB	LOSS	8
	87 CONSTRUCTION		
8710	SUPERV:EXCAVATING	LOSS	16,18
8718	LABOUR:EXCAVATING	LOSS	16,18
8733	CONSTR ELECTRICIANS	LOSS	4,14,16,17,18
8739	ELECTRICAL POWER:NEC	LOSS	19
8785	PAINTERS	LOSS	16
	91 TRANSPORTATION		
9133	CONDUCTORS:RAILWAY	LOSS	18
9173	TAXI DRIVERS	LOSS	18
9175	TRUCK DRIVERS	LOSS	2,14,18
	93 MAT. HANDLING		
9310	SUPERV:MAT-HANDLING:NEC	LOSS	18
	95 OTHER CRAFTS		
9510	SUPERV:PRINTING	LOSS	8
9511	TYPESETTING	LOSS	8
9514	PRINTING ENGRAVING	LOSS	8
9530	SUPERV:UTILITIES	LOSS	17

APPENDIX D3
SUMMARY OF 4-DIGIT OCCUPATIONS THAT GAINED AND LOST IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
11	MAN. & ADMIN.		
1130	GENERAL MANAGERS	GAIN	23
1130	GENERAL MANAGERS	LOSS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
1171	FINANCIAL OFFICERS	GAIN	3
1171	FINANCIAL OFFICERS	LOSS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
21	NATURAL SCI.		
2117	PHYSICAL SCI TECHN	GAIN	4
2117	PHYSICAL SCI TECHN	LOSS	9,13,14,23
2143	CIVIL ENGINEERS	GAIN	13
2143	CIVIL ENGINEERS	LOSS	17,22,23
2144	ELECTRICAL ENGINEERS	GAIN	11,12,17,22,23
2144	ELECTRICAL ENGINEERS	LOSS	19
2145	INDUSTRIAL ENGINEERS	GAIN	19,21,22,23
2145	INDUSTRIAL ENGINEERS	LOSS	9,10,11,12,13,14
2147	MECHANICAL ENGINEERS	GAIN	9,10,17,22
2147	MECHANICAL ENGINEERS	LOSS	11,12,13,14
2161	SURVEYORS	GAIN	4
2161	SURVEYORS	LOSS	23
2163	DRAUGHTING OCCUPATIONS	GAIN	4,13,19
2163	DRAUGHTING OCCUPATIONS	LOSS	9,10,11,12,14,17,22,23
2165	ENGINEERING TECHN	GAIN	4,9,10,11,12,13,14,17,22
2165	ENGINEERING TECHN	LOSS	19,23
2183	SYSTEMS ANALYSTS	GAIN	4,9,10,12,13,14,17,19,21,22,23
2183	SYSTEMS ANALYSTS	LOSS	11
23	SOCIAL SCI.		
2333	WELF COMM SERV OCCS	GAIN	22
2333	WELF COMM SERV OCCS	LOSS	23
2343	LAWYERS & NOTARIES	GAIN	23
2343	LAWYERS & NOTARIES	LOSS	22
2349	LAW & JURIS:NEC	GAIN	23
2349	LAW & JURIS:NEC	LOSS	22
2351	LIBRARIANS. ARCHIVIST	GAIN	23
2351	LIBRARIANS. ARCHIVIST	LOSS	22
33	ARTIST		
3352	WRITERS & ED:PUB	GAIN	22
3352	WRITERS & ED:PUB	LOSS	8,19
41	CLERICAL		
4111	SECRETARIES & STENO	GAIN	9,10,11,12,13,17,19
4111	SECRETARIES & STENO	LOSS	1,4,5,6,7,8,14,15,16,18,20,21,22,23
4131	BOOKKEEPERS	GAIN	1,2,3,4,5,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
4131	BOOKKEEPERS	LOSS	6,7
4151	PRODUCTION CLERKS	GAIN	6,7,8,9,10,11,13,15
4151	PRODUCTION CLERKS	LOSS	12
4153	SHIPPING CLERKS	GAIN	6,7,8,9,10,11,12,13,14,15,20
4153	SHIPPING CLERKS	LOSS	5,18
4155	STOCK CLERKS	GAIN	5,8,9,10,11,12,14,20

APPENDIX D3
SUMMARY OF 4-DIGIT OCCUPATIONS
THAT GAINED AND LOST IN EMPLOYMENT SHARE

OCC CODE	OCCUPATION	SHARE GAIN/ LOSS	INDUSTRY CODE
4155	STOCK CLERKS	LOSS	4,6,7,13,15,17
4171	RECEPTIONISTS	GAIN	8,9,13,16,22,23
4171	RECEPTIONISTS	LOSS	1
4197	GEN OFF CLERKS	GAIN	7,9,15,16,22
4197	GEN OFF CLERKS	LOSS	1,4,5,6,8,10,11,12,13,14,17,18,19,20,23
51	SALES		
5135	SALESPERSONS COM:NEC	GAIN	5,8,20
5135	SALESPERSONS COM:NEC	LOSS	13
81	PROCESSING		
8137	METAL MOULDING	GAIN	15
8137	METAL MOULDING	LOSS	9,12
8179	CHEMICALS:NEC	GAIN	13,15
8179	CHEMICALS:NEC	LOSS	6
83	MACHINING		
8311	TOOL & DIE MAKING	GAIN	9,10,15
8311	TOOL & DIE MAKING	LOSS	11,12
8313	MACHINIST	GAIN	7,9,11,12
8313	MACHINIST	LOSS	10,14,15
8334	MET-WORK-MACH OP:NEC	GAIN	10
8334	MET-WORK-MACH OP:NEC	LOSS	7,9,11,12,15
8335	WELDING	GAIN	7,9,10,11,12,15
8335	WELDING	LOSS	14
85	FABRICATING		
8569	FAB TEX,LTHR,FUR:NEC	GAIN	6
8569	FAB TEX,LTHR,FUR:NEC	LOSS	15
8580	SUPERV:MECHANICS	GAIN	4,5,8,17,18,20
8580	SUPERV:MECHANICS	LOSS	16
8581	AUTO MECHANICS	GAIN	18
8581	AUTO MECHANICS	LOSS	4,5,10,14,16,17,20
8584	INDUST.FARM MECHANICS	GAIN	2,4,5,6,7,8,9,10,12,13,14,16,17,20
8584	INDUST.FARM MECHANICS	LOSS	11,18
8599	OTHER PROD FAB:NEC	GAIN	9,15
8599	OTHER PROD FAB:NEC	LOSS	14
87	CONSTRUCTION		
8730	SUPERV:ELEC POWER	GAIN	4
8730	SUPERV:ELEC POWER	LOSS	17,19
8780	SUPERV:OTHER CONSTR	GAIN	16,17,18
8780	SUPERV:OTHER CONSTR	LOSS	14
8781	CARPENTERS	GAIN	4
8781	CARPENTERS	LOSS	16
8782	MASONS	GAIN	14
8782	MASONS	LOSS	16
8791	PIPEFITTING.PLUMBING	GAIN	17
8791	PIPEFITTING.PLUMBING	LOSS	4,16
8798	LABOUR:OTHER CONSTR	GAIN	14
8798	LABOUR:OTHER CONSTR	LOSS	16
93	MAT. HANDLING		
9311	HOISTING OCCS:NEC	GAIN	9
9311	HOISTING OCCS:NEC	LOSS	14
9313	LONGSHORE WORKERS	GAIN	5,7,9,14
9313	LONGSHORE WORKERS	LOSS	13,18
9317	PACKAGING OCCS:NEC	GAIN	18
9317	PACKAGING OCCS:NEC	LOSS	5,7,9,13,14
9318	LABOUR:MAT-HANDLING:NEC	GAIN	18
9318	LABOUR:MAT-HANDLING:NEC	LOSS	7,9

APPENDIX E
PART-TIME AND FULL-TIME EMPLOYMENT IN ONTARIO, 1981

This appendix provides estimates of 1981 part-time and full-time employment for males and females, by 2-digit occupational groups, in Ontario using 1981 Census data. The data were provided in a special tabulation produced by Statistics Canada.

Up until 1975, part-time employment was defined so as to include persons working up to 35 hours per week. After 1975, however, part-time employment was defined as less than 30 hours per week. Since the definition of part-time employment changed over the 1971-1981 period it is difficult to determine trends in the hours of work over the 1971-1981 period using Census data. In Appendix 1 to the Task Force's final report, Labour Market Trends in Ontario, 1950-1980, trends in the organization of work were analyzed for the 1975-1985 period using Labour Force Survey data.

In 1981 about 83 percent of total employment in Ontario was full-time and about 17 percent was part-time. However, the proportion varies significantly with occupational group.

Mining and Quarrying occupations had the highest proportion of full-time employment. Machining and Related occupations; Managerial, Administrative and Related occupations; Natural Sciences, Engineering and Mathematics occupations; and Processing occupations also had very high proportions of full-time employment.

The proportion of part-time employment was highest in Service occupations, making up nearly one-third of total employment within that group in 1981. Part-time employment was also high in Medicine and Health occupations; Sales occupations; Art and Sports occupations; and Farming occupations.

Five occupational groups make up more than half (54.7 percent) of full-time employment in Ontario. They are: Clerical occupations; Product Fabricating, Assembling and Repairing Occupations; Managerial, Administrative and Related occupations; Service occupations; and Sales occupations.

Part-time employment is concentrated in three occupational groups who accounted for over 60 percent of total part-time employment in 1981. These are Clerical occupations; Service occupations; and Sales occupations.

In all occupations females have a greater proportion of part-time employment relative to their proportion of total employment. In most occupations, however, females proportion of full-time employment is approximately the same as their proportion of total employment in that occupational group. Males make up relatively higher proportion of full-time employment in Social Sciences and Related occupations; Teaching and Related occupations; Medicine and Health occupations; Arts and Sports occupations; Sales occupations; Farming occupations; and Transportation Equipment Operating occupations.

TABLE E1
PART-TIME AND FULL-TIME EMPLOYMENT IN ONTARIO, 1981

Occ. Code	Occupation	FULL-TIME EMPLOYMENT 1981 Total (000)	Male %	Female %	% of Full-Time Total	PART-TIME EMPLOYMENT 1981 Total (000)	Male %	Female %	% of Part-Time Total	TOTAL EMPLOYMENT 1981 Total (000)	Male %	Female %	% of Total Employment
11	Man. & Admin.	300.3	75.9	24.1	8.9	12.4	36.6	63.4	1.8	312.7	74.4	25.6	7.7
21	Natural Science	152.5	87.7	12.3	4.5	6.7	67.6	32.4	1.0	159.1	86.9	13.1	3.9
23	Social Science	57.2	53.2	46.8	1.7	10.3	20.4	79.6	1.5	67.5	48.2	51.8	1.7
25	Religion	8.2	86.5	13.5	0.2	0.9	62.4	37.6	0.1	9.2	84.1	15.9	0.2
27	Teaching	136.5	47.8	52.2	4.1	28.2	13.3	86.7	4.1	164.7	41.9	58.1	4.1
31	Medicine	126.1	27.4	72.6	3.8	45.8	6.2	93.8	6.7	171.9	21.7	78.3	4.3
33/37	Art and Sports	45.4	65.3	34.7	1.4	14.4	43.1	56.9	2.1	59.8	60.0	40.0	1.5
41	Clerical	611.4	25.9	74.1	18.2	176.7	12.7	87.3	25.8	788.2	23.0	77.0	19.5
51	Sales	291.7	68.5	31.5	8.7	99.5	28.8	71.2	14.5	391.2	58.4	41.6	9.7
61	Service	300.1	58.7	41.3	8.9	138.5	30.5	69.5	20.2	438.7	49.8	50.2	10.8
71	Farming	106.4	80.6	19.4	3.2	31.4	56.8	43.2	4.6	137.8	75.2	24.8	3.4
73	Fishing	1.1	89.5	10.5	0.0	0.2	82.4	17.6	0.0	1.2	88.5	11.5	0.0
75	Forestry	8.7	92.1	7.9	0.3	1.1	76.6	23.4	0.2	9.7	90.4	9.6	0.2
77	Mining	16.7	98.3	1.7	0.5	0.5	92.0	8.0	0.1	17.2	98.1	1.9	0.4
81	Processing	138.5	81.5	18.5	4.1	9.9	60.0	40.0	1.4	148.4	80.1	19.9	3.7
83	Machining	130.7	91.2	8.8	3.9	4.3	78.5	21.5	0.6	135.0	90.8	9.2	3.3
85	Fabricating	337.2	76.0	24.0	10.0	19.4	60.0	40.0	2.8	356.6	75.2	24.8	8.8
87	Construction	201.5	98.3	1.7	6.0	17.0	96.2	3.8	2.5	218.5	98.1	1.9	5.4
91	Transportation	124.8	94.8	5.2	3.7	15.4	67.9	32.1	2.2	140.2	91.9	8.1	3.5
93	Material Handling	77.9	74.3	25.7	2.3	11.4	68.0	32.0	1.7	89.4	73.5	26.5	2.2
95	Other Crafts	49.7	82.2	17.8	1.5	4.4	48.7	51.3	0.6	54.1	79.5	20.5	1.3
99	Other Occupations	136.1	70.3	29.7	4.1	36.5	52.5	47.5	5.3	172.5	66.5	33.5	4.3
	TOTAL	3358.7	64.7	35.3	100.0	684.8	31.2	68.8	100.0	4043.5	59.0	41.0	100.0

NOTE: The 1981 full-time and part-time employment figures are estimates using 1980 data.
SOURCE: Special tabulation by Statistics Canada based on 1981 census.

APPENDIX F
EMPLOYMENT BY AGE AND SEX IN ONTARIO, 1981

This appendix provides 1981 estimates of employment by 2-digit occupation age and sex for Ontario. The data were provided in a special tabulation by Statistics Canada.

Employment Share by Age, 1981

Table F1 demonstrates clearly that the largest proportion of the labour force in 1981 was between the ages of 25 and 44. This 20 year age group holds the largest share of all occupations. In particular, this group held a large share of occupations in management and administration, natural science and engineering, social science, medicine, transportation and manufacturing and other professional occupations. Somewhat lower representations were in primary and service occupations. (See Table F1 for breakdown of professional, primary and manufacturing occupations.)

Youth between the ages of 15 and 24, as may be expected, had the largest concentration, relative to their own and other age group, and relative to other age groups, in service, clerical, material handling and primary occupations. Their lowest share of jobs was in management and administration, and in teaching.

The age group 45 to 64, relative to their own age group, held a fairly large share of jobs in management and administration, construction, transportation and primary occupations. They held a lower share of social science, clerical and sales jobs.

The age group, 65 and over, held small shares in mainly all categories with the highest share, relative to their age group, in primary occupations. This shows that a somewhat larger proportion of persons past normal retirement age continue to work in mining, fishing and farming.

Employment Share by Age and Sex, 1981

As has been described in Section 3 of this report, males and females tend to be concentrated in different occupations: females in teaching, medicine and clerical occupations and males in all other occuptions with the exception of sales, service and social science occupations where they have fairly equal representation.

When age and sex are examined together, it is apparent that the occupational segregation between males and females is somewhat less in the younger age group 15-24. In particular, the representation of males and females is almost equal in managerial and administrative and other professional occupations. As one moves up the age scale, the occupational distribution by sex shows greater disparity, showing differences in the 25 to 44 age group, and the greatest differences in the age groups 45 and over.

TABLE F1
EMPLOYMENT SHARE BY AGE AND SEX, 1981
(PERCENT)

Occupation	AGE & SEX															
	Total Employment			15 — 24			25 — 44			45 — 64			65+			
	Tot. (000)	M %	F %	Tot. %	M %	F %	Tot. %	M %	F %	Tot. %	M %	F %	Tot. %	M %	F %	Tot. %
Manag. & Admin.	314.3	74.3	25.7	5.1	2.7	2.4	57.9	41.6	16.3	35.4	28.5	6.9	1.6	1.4	0.2	100
Nat. Sc. & Eng.	161.1	86.7	13.3	15.5	11.8	3.7	60.4	52.2	8.2	23.2	21.7	1.5	0.9	0.8	0.1	100
Social Science	68.9	47.7	52.3	14.9	4.2	10.7	59.8	30.7	29.1	23.2	11.5	11.7	2.0	1.4	0.6	100
Teaching	166.8	41.6	58.4	6.5	1.6	4.9	69.4	28.4	41.0	23.1	11.1	12.0	0.9	0.4	0.5	100
Medicine	175.2	21.5	78.5	14.7	1.9	12.8	59.8	12.1	47.7	24.1	6.5	17.6	1.5	1.0	0.5	100
Other Professional[1]	70.9	66.2	33.9	22.0	11.4	10.6	51.9	36.2	15.7	22.4	15.8	6.6	3.8	2.8	1.0	100
Clerical	813.3	22.7	77.3	29.2	6.7	22.5	46.0	9.7	36.3	23.5	5.8	17.7	1.3	0.5	0.8	100
Sales	404.0	57.6	42.4	24.7	11.7	13.0	43.4	27.0	16.4	28.8	16.8	12.0	3.1	2.1	1.0	100
Service	466.0	48.8	51.2	33.1	15.1	18.0	36.1	17.7	18.4	28.2	14.3	13.9	2.5	1.5	1.0	100
Primary Occupations[2]	174.1	73.2	20.8	27.7	26.9	0.8	35.1	26.3	8.8	30.2	19.0	11.2	7.1	6.9	0.1	100
Manuf. Occupations[3]	653.9	79.3	20.7	21.3	17.1	4.2	49.1	38.6	10.5	28.6	22.7	5.9	1.0	0.9	0.1	100
Construction	222.6	98.1	1.9	19.3	18.8	0.5	47.7	46.7	1.0	31.8	31.4	0.4	1.2	1.2	0.0	100
Transportation	142.2	91.7	8.3	16.8	15.6	1.2	51.4	46.3	5.1	30.5	28.5	2.0	1.3	1.2	0.1	100
Material Handling	92.0	73.2	26.8	30.3	23.9	6.4	42.2	29.5	12.7	26.8	19.2	7.6	0.7	0.5	0.2	100
All other occup.[4]	248.1	68.3	31.6	27.0	18.6	8.4	36.6	25.2	11.4	29.4	20.7	8.7	6.9	3.8	3.1	100
Total	4,173.4	58.5	41.5	22.6	11.9	10.7	47.6	27.7	19.9	27.6	17.3	10.3	2.2	1.5	0.7	100

1 Other Professional includes Religion, Sports and Artistic occupations.
2 Primary Occupations includes Fishing, Farming and Mining.
3 Manufacturing Occupations includes Fabricating, Processing and Machining.
4 Other Occupations includes other crafts and other unclassified occupations.

Source: Special Tabulation by Statistics Canada based on 1981 Census.

APPENDIX G
INDUSTRY SECTOR DEFINITIONS BY 3-DIGIT STANDARD INDUSTRIAL CLASSIVIATIONS (SIC)

	Industrial Sector	1970 S.I.C.
1.	Agricultural, Fishing & Trapping	001-021,041-047
2.	Forestry	031-039
3.	Mineral Fuel Mines & Wells	061,064
4.	Other Mines & Quarries	051-059,071-099
5.	Food, Feed, Beverage & Tobacco	101-153
6.	Textile & Clothing	181-249
7.	Wood & Furniture	251-268
8.	Paper & Allied Industries	271-289
9.	Primary Metal & Metal Fabricating	291-309
10.	Motor Vehicles & Parts	323-325
11.	Machinery & Other Transportation	311-321,326-329
12.	Electrical Products	331-339
13.	Chemical, Rubber & Petroleum	162-165,365-379
14.	Non-metallic Mineral Products	351-359
15.	Other Manufacturing Industries	172-179,391-399
16.	Construction	404-421
17.	Electric Power & Gas Utilities	572-579
18.	Transportation & Storage	501-527
19.	Communication	543-548
20.	Trade	602-699
21.	Finance, Insurance & Real Estate	701-737
22.	Communities, Business & Personal Services	801-899
23.	Public Administration	902-991

APPENDIX H
2-DIGIT OCCUPATIONAL GROUPS
CANADIAN CLASSIFICATION AND DICTIONARY OF OCCUPATIONS, 1971

11	Managerial, Administrative and Related Occupations
21	Occupations in Natural Sciences, Engineering and Mathematics
23	Occupations in Social Sciences and Related Fields
25	Occupations in Religion
27	Teaching and Related Occupations
31	Occupations in Medicine and Health
33	Artistic, Literary, Performing Arts and Related Occupations
37	Occupations in Sport and Recreation
41	Clerical and Related Occupations
51	Sales Occupations
61	Service Occupations
71	Farming, Horticultural and Animal-Husbandry Occupations
73	Fishing, Hunting, Trapping and Related Occupations
75	Forestry and Logging Occupations
77	Mining and Quarrying Including Oil and Gas Field Occupations
81/82	Processing Occupations
83	Machining and Related Occupations
85	Product Fabricating, Assembling and Repairing Occupations
87	Construction Trades Occupations
91	Transport Equipment Operating Occupations
93	Material-Handling and Related Occupations, n.e.c.
95	Other Crafts and Equipment Operating Occupations
99	Occupations Not Elsewhere Classified

FINAL REPORT AND APPENDICES OF THE
ONTARIO TASK FORCE ON EMPLOYMENT AND NEW TECHNOLOGY

Final Report: **Employment and New Technology**

Appendices:

1. Labour Market Trends in Ontario, 1950-1980.
2. Occupational Employment Trends in Ontario, 1971-1981.
3. Emerging New Technology, 1985-1995: Framework for a Survey of Firms.
4. Employment and New Technology in Ontario's Manufacturing Sector: A Summary of Selected Industries.
5. Employment and New Technology in the Iron and Steel Industry.
6. Employment and New Technology in the Metal Fabricating Industry.
7. Employment and New Technology in the Machinery and Equipment Industry.
8. Employment and New Technology in the Airdraft and Aircraft Parts Industry.
9. Employment and New Technology in the Communications Equipment Industry.
10. Employment and New Technology in the Office, Store and Business Machine Industry.
11. Employment and New Technology in the Plastic Processing Industry.
12. Employment and New Technology in Ontario's Service Sector: A Summary of Selected Industries.
13. Employment and New Technology in the Chartered Banks and Trust Industry.
14. Employment and New Technology in the Insurance Industry.
15. Employment and New Technology in the Government Services Industry.
16. Employment and New Technology in the Telecommunications Industry.
17. Employment and New Technology in the Retail Trade Industry.
18. Employment and New Technology in the Computer Services and Management Industry.
19. Industry-Sector and Occupational Employment in Ontario, 1985-1995.
20. Technological Change, Productivity, and Employment: Studies of the Overall Economy.